



# NEW YORK



IRON  
ROOFING  
AND  
CORRUGATING CO.



OFFICE AND FACTORY  
FIRST AND WASHINGTON STS.  
JERSEY CITY, N. J. 




L. LEWIS SAGENDORPH,  
President.

F. E. SAGENDORPH,  
Vice-President and Manager.

EDW. P. HOYT,  
Secretary and Treasurer.

## SPECIAL NOTICE

N placing this Illustrated Catalogue before the public, we have endeavored to explain and illustrate the various uses to which sheet metal has been adapted in the construction of all kinds of buildings, during the past ten years. At the present time it stands superior to lumber, plaster, composition and tin, being more durable, cheaper, less liable to repairs, weather-proof, saves insurance, danger from fire, lightning and sparks, at one quarter the cost of brick and stone.

During the past three years we have filled many orders for sheet metal, made into the various forms herein shown, for the entire exterior and partly the interior construction of buildings, viz: Sheet Metal Clapboards, Corrugated Siding and Ceilings, Iron Roofing, Curved Awnings, Iron Cornices, etc., which heretofore were chiefly made of wood, plaster, brick or stone, all of which soon deteriorate by the atmospheric influences and mechanical forces.

If this Catalogue falls into the hands of those who contemplate building or repairing, it will certainly pay them to peruse these pages carefully, and, if convenient, have their architect or builder, or both, consult together, and compare with cost of other materials, points of security against fire, neatness of finish, lightness of material, possessing strength and durability equal to stone or brick.

Send for prices and samples. We cheerfully make estimates from drawings without charge.

Truly yours,

New York Iron Roofing and Corrugating Company.



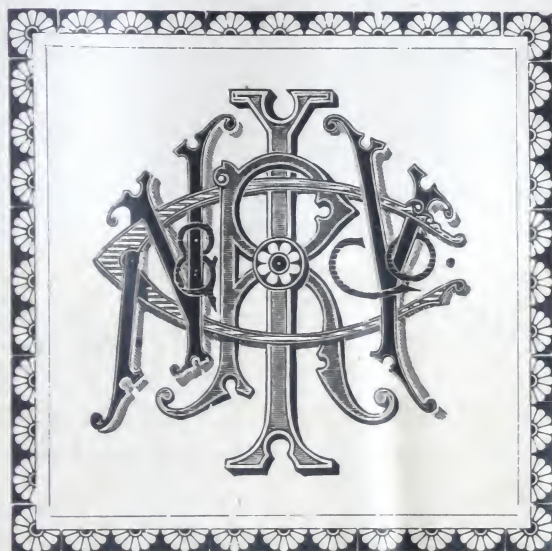
5226/5507  
THE 2 FINEST 2 EQUIPPED

2 MANUFACTURING 2 CO.

....IN THE ..

United

States



of

America

✧ FOR TURNING OUT ✧

SHEET METAL GOODS



Working Under 115 Patents of the Latest Issue

NINTH SERIES, 1901

ILLUSTRATED CATALOGUE

OF THE

NEW YORK IRON ROOFING  
*and* CORRUGATING CO.

MANUFACTURERS OF

Pressed Standing Seam, V Crimped (old style) and Roll Cap Roofing, Corrugated Oval and Corrugated Diamond Siding. Twilled Corrugated  $\frac{3}{8}$ , Twilled Corduroy  $\frac{1}{16}$ , Corrugated Awnings, Corrugated Ceilings with or without panels, Cornice Gutters, Downfalls, Window and Door Caps, Sheet Metal Clapboarding, and Steel Pressed Brick; Rock Faced Siding from

FIRST QUALITY SHEET STEEL

Either Black or Galvanized, which time and experience has proven to be the most durable, most perfect, most economical, and most satisfactory metals for

*Roofing and Siding for  
Buildings of every description*

Such as Dwellings, Store-rooms, Warehouses, Railway Stations, Grain Elevators, Flour Mills, Cotton Compress Buildings, Cotton Gins, Foundries, Machine Shops, Rolling Mills, Blast Furnaces, Saw and Planing Mills, Distilleries and Bonded Warehouses, Furniture Factories, Tobacco Dry Houses, Coal Elevators, Powder Magazines, Cattle and Lumber Sheds, Barns, Stables, etc.

MANUFACTURERS ALSO OF 


OBELISK METALLIC PAINT AND OBELISK METALLIC CEMENT

For the Thorough Repairing and Protection of all Metal Surfaces.



## A FEW POINTS RELATING TO IRON ROOFING

---

RDINARY black Sheet Iron painted, has been used for roofing purposes in both Europe and America, for more than a century past, and by practical tests and comparisons with other roofing materials, has proven itself to be the best for all general purposes, where perfect protection from the elements, combined with durability and economy are carefully considered.

A new era is now opened in Iron Roofing, by the use of a fine quality of sheet iron, and the application of new and improved devices for fastening the sheets. The enormous quantities of Iron that have been used for roofing purposes during the last half of the present decade evidences the high regard with which it is looked upon by the general public.

They have learned that GOOD sheet iron of suitable weight and thickness, will, if properly laid and taken care of, give more satisfactory results than any other known roofing material. It is the most practical; it is the most economical, and is destined to drive from the market Tin, Shingles, Slate and Tiles.

We will say for the information of those who are not familiar with the lasting qualities of iron roofing, that there are now in existence in many cities and towns throughout this country, iron roofs in an excellent state of preservation, that were laid between twenty and fifty years ago, and have had no repairs made upon them since, having been cared for by coating with metallic paint once within every three to five years.

This sets at rest any claim that they rust out. We have within the last twenty-five years, or since 1869, laid hundreds of iron roofs that are yet in first-class condition, and doing the property owners good service.

All iron roofing sheets are heavily coated with metallic paint on both sides before laying, and as there is no wear upon the under side, a periodical coat of paint on the upper surface will preserve them indefinitely.

IRON ROOFING IS FIRE PROOF and its application to a building reduces the rate of insurance fully one-third, as a rule, and in towns poorly provided with fire apparatus as much as one-half to two-thirds.

It is a perfect protection where fire originates in adjoining or surrounding buildings, and in the event of a fire originating within a building so covered, the roof timbers alone can be burned, the iron roof proving an effectual barrier to its spreading beyond the building wherein it originated, therefore it is to the interest of everyone to use some style of Iron Roofing.

IRON ROOFING IS LIGHTNING PROOF. At a recent meeting of the Board of Underwriters of New York, held in New York City, they advocated strongly the general use of metal for ice houses, as careful examination made by them had clearly shown that no ice house covered with metal had ever been injured by lightning, but that several which had been covered with Shingle and Tar-paper roofs had been struck and consumed by the electrical fluid. They therefore made heavy discounts on premiums where such buildings were covered with metal.

The distinguished Prof. Mitchell, as well as other eminent scientists, say that it is impossible for a building to be injured by lightning when covered with iron. Thus an iron roof will render unnecessary the use of lightning rods, thereby effecting a considerable saving.



# WHAT WE MAKE

*Corrugated Roofing.*

*Corrugated Siding.*

*Corrugated Ceiling.*

*Corrugated Arches.*

*Corrugated Shutters.*

*Corrugated Doors.*

*Curved Corrugated Awnings.*

*V Crimp Steel Roofing.*

*Standing Seam Steel Roofing*

*Roll and Cap Steel Roofing.*

*Self-Capping Roll Steel Roofing.*

*Imitation Brick Steel Siding.*

*Rock Face Steel Siding.*

*Steel Shingles.*

*Steel Ceilings.*

*Sheet Steel Weather Boarding.*

*Beaded Sheet Steel Ceiling.*

*Ridge and Hip Capping.*

*Iron Cornice Work.*

*Flat Galvanized Sheets.*

*Flat Black Steel Sheets.*

*Flat Black Iron Sheets.*

*Galvanized Eaves Trough.*

*Galvanized Conductor Pipe.*

*Galvanized Elbows and Shoes.*

*Hooks and Hangers.*

*Galvanized O-G Hanging Gutters.*

*Etc., Etc.*



FIRST AND WASHINGTON STREETS, JERSEY CITY, N. J.

DEPARTMENT FIRST

# PRESSED STANDING SEAM STEEL ROOFING

Patented October 14, 1884, January 16, March 3 1885

Corporations, Manufacturing Companies, Merchants and Farmers, Look to Your Interests!

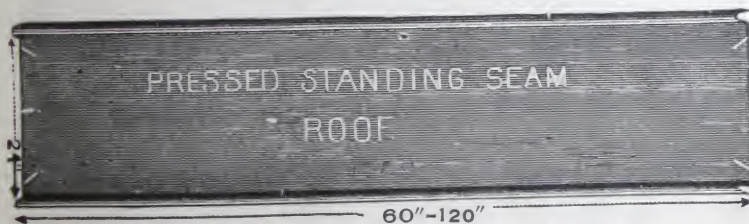
CAN BE APPLIED BY ANY ORDINARY LABORER

ITS MECHANICAL CONSTRUCTION EXCELS THAT OF ALL COMPETITORS

The only Iron Roof in the market that has thoroughly watertight metal joints, not liable to come loose by the action of the weather, as the entire binding of several sheets is performed with metal cleats and mechanical tools.

WIND, FIRE, WEATHER AND LIGHTNING PROOF.

Fig. 1



Shows sheet as shipped of Standing Seam Steel Roofing. The mark shows where to snip sheets for end joints, etc

CAN BE LAID OVER SHINGLES, SHEATHING, LATHS OR RAFTERS.

Fig. 2



Shows Barbed Wire Nail shipped with Roofing

Fig. 3



Shows Tongued Metal Cleat as shipped

Fig. 4



Shows Tongue Cleat bent ready to place over Standing Seam. The perforated end of cleat goes on sheathing.

Our STANDING SEAM CRIMPED JOINTS form a water tight connection and are firmly held to the sheathing or rafters by the application of our Tongued Cleat.

This mode of fastening is the best ever adapted for metal roofing. It is very strong and cannot blow off. Expansion and contraction are so well provided for that the fastenings never come loose from the effects of heat and cold. It is also very simple—anyone can easily put it on. No tools are required but a pair of tongs, hand snips to cut the iron, and a jointer to make end joints. We make no holes in the sheet, such as are made in laying so called "Cap" and V Crimped Roofing, using wooden strips, which give trouble in putting on, and soon become loose, causing roofs to leak and making them liable to blow off. Our method of forming the seams is acknowledged by all to be the simplest and most flexible joint ever invented. This is evidenced by the favor with which it is received by architects, builders and mechanics wherever it has been introduced.

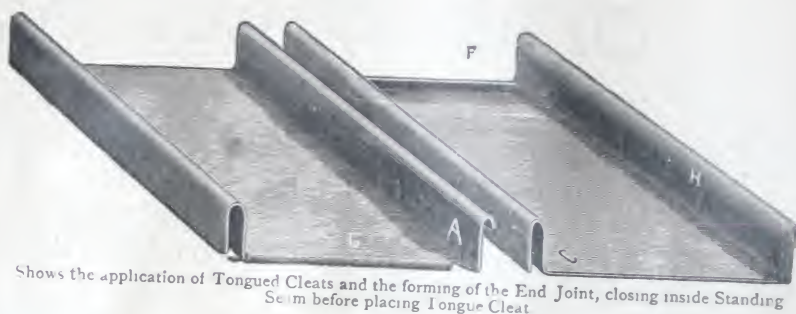


When put on by our method there is no such thing as a leaky roof or a roof being blown off. By the old manner of fastening the iron to the sheathing by nails driven through the iron, it was found that the contraction and expansion of the metal would soon tear the iron loose from the nail or screw heads at the seam or joints. By our method our seams have sufficient flexibility to compensate for all expansion or contraction of the metal preparation of the steel.

Always close seam H, as in Fig. 3, before placing on Cleat.

Always put on End Cleats, as in Fig. 9, Letter C, Page 8.

Fig. 3



## EXPLANATION FOR CLEAT

Begin to lay iron, at RIGHT HAND eave of either side of roof Continue the course until complete to ridge.

Fig 5



Draw the end of the cleat marked "A" over second sheet, then press together the whole, with squeezing tongs. When finished, it makes a perfect, water tight standing seam.

## NEW PRESSED STANDING SEAM CLEAT



To be placed a foot apart.

The Cleat "D" is taken and fitted over the standing seam "H" by placing the curved end of cleat down in an upright position on the inside of seam "A," then bend the upper part over the seam, fitting it around the curve of seam "H" and the end oval opening, and plain "B" extends out and down upon the rafters or sheathing, leaving the tongue "D" in an upright position (as shown in Cut "D"), then fasten the cleat to sheathing by driving barbed wire nail through the plain "B"; this will hold the cleat and sheet firmly to the sheathing. Continue this with the sheet until the course is finished; then the next sheet for second course is fitted over the bent portion of cleat "B" between the tongue "D" Press this sheet firmly down, and bend the end of tongue cleat "D" over the double seam, and press them tightly together with the tongs. This will finish the standing seam, fastening both sheets to the sheathing and thoroughly closing the joint against leakage. Always close the double seam with tongs before cleating opposite side of sheet.

It will be observed that the crimp of "C" thus forms an iron cap covering the joint "A," and that the sheets are held to the sheathing without being punctured with nails, the whole being held to the sheathing by cleat "E," which may be placed as frequently along the standing seam as may be required. It will also be observed that the sheets require no binding or forming except at the ends, which are seamed in the usual way. Before applying the cleat to standing seam "A," close it with tongs as shown in cut of sheets "C," letter "H"; sheet "A" shows seam as shipped, and sheet "C" after it has been closed; this will allow placing of cleat in position which will secure its binding around the standing seam, and prevent the drawing of double seam while closing it with tongs. Sheet "A," letter "G" shows end joint at bottom of sheet; and sheet "C," letter "F" shows end joint turned upward on upper end of sheet, allowing the two sheets to be locked together and closed with a mallet.



Fig. 486



Side Wall Designs, subject to many changes.

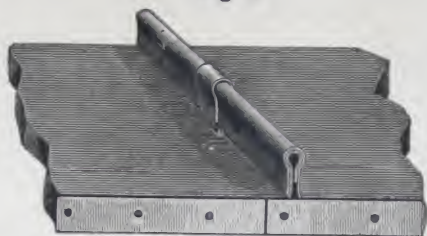
Fig. 474



Medium Continuous Ceiling Plates,  $\frac{1}{8}$  inch deep.



Fig. 6



Shows Standing Seam finished. Also method of turning down and nailing the edge along the eaves when the building is not provided with a cornice or box gutter

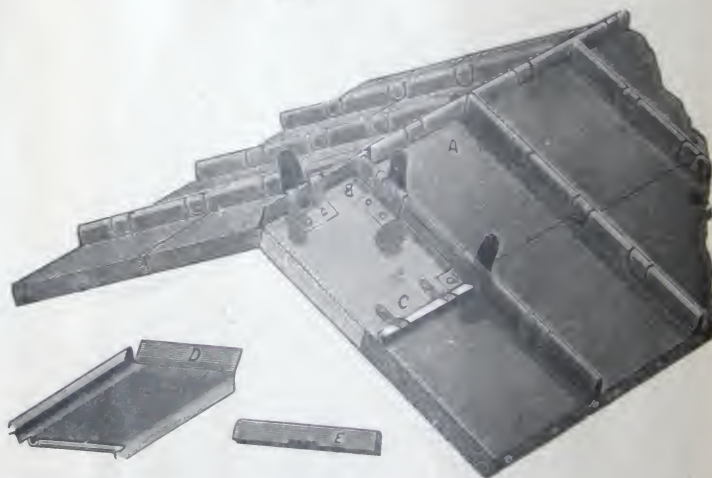
Fig. 7



Shows the manner in which two or more sheets are joined together at ends of sheets, and opposite ends with joint made ready to place in position. This operation is performed by the use of Joiner, which is sent with tools if ordered.

When using Steel Roofing we recommend our customers to place a layer of paper on the sheathing before applying the steel, especially on dwellings. The paper is a non-conductor and preserves a uniform temperature under the roof, also stopping condensation. It pays the consumer to use paper lining.

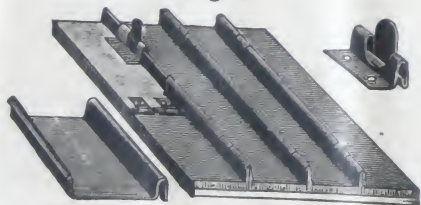
Fig. 9



Shows the manner in which the cone of ridge is finished, also mode of laying roof proper.

A—Ridge finished. B—One side of roof laid complete, with tongue cleat in position. C—Manner of cleating end joint. D—full sheet prepared to finish ridge. E—Cap made from a narrow piece of iron, 2 inches wide, bent in a joiner to form a U, this is to be fitted over the two flanges at top of ridge, bending tongue of cleat over, then squeezed together with tongs; this finishes the roof and ridge in a very simple manner, and requires little extra labor or care to do it properly. For two other methods of finishing the cone, see Figs. 11 and 27.

Fig. 8



Shows roofing sheets applied to close board sheathing, finish at ends, and mode of forming end joints; placing of tongued cleats, finish of standing seam. In laying standing seam roofing, always hook ends of sheets together, as in Fig. 7, close this seam with wooden mallet, and never use a hammer, as it bruises and cuts the iron.

Commence laying sheets at right hand corner of eave and end of building.

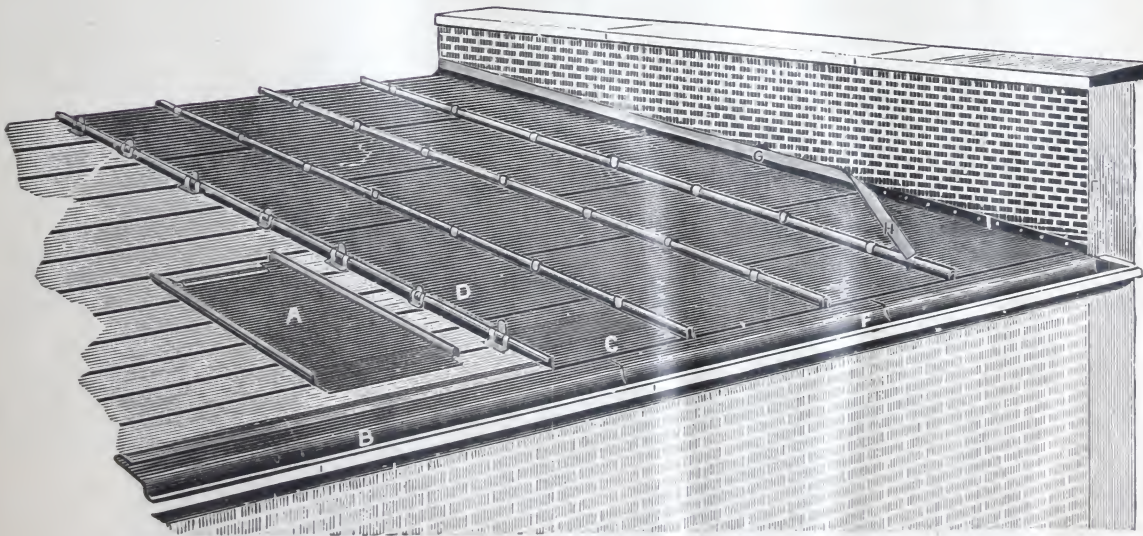


# ROOF HAVING PARAPET WALL

—AND—

## PITCH ONE WAY

Fig. 10



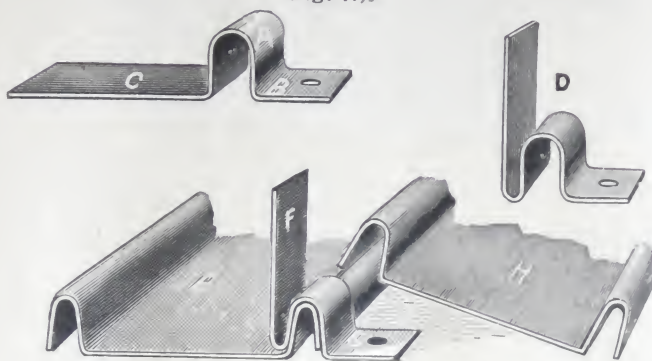
This cut represents the method of laying roof on building having a pitch in one direction only and Box Gutter.

A—Shows roofing formed ready to turn hook on lower end, preparatory to hooking into upper edge of iron lining of box gutter. A—Shows the end joint turned on upper end of sheet ready to hook into the next sheet. B—Shows box gutter lined with sheet iron, on the upper edge of which can be seen the hook turned to receive the sheet A. C—Shows roofing sheet hooked into lining of box gutter, and the joint closed and completed by hammering down (with a wooden mallet). D—Shows roofing sheets all laid and standing seam finished, and cleats on outer edge placed into position and nailed ready for next course. E—Shows parapet wall and method of flashing and counter flashing; we also finish this portion of the work by flashing with fiber patch and iron cement. F—Shows joint in the lining of the box gutter, and mode of joining two or more sheets to make a perfectly water tight gutter joint. The method of flashing against parapet walls also applies to skylights, chimneys, fire walls and elevator towers, as in Figs. 13 and 14, page 12.



# MODE OF LAYING STANDING SEAMS ON DOUBLE PITCH ROOF

Fig. 11½

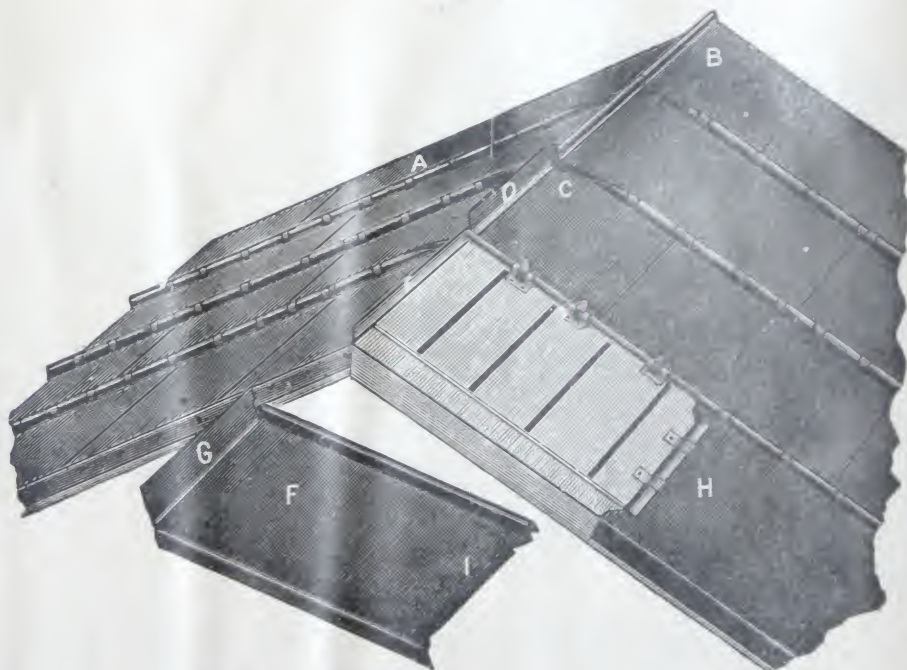


Shows mode of using double fold cleat to any of our Pressed Standing Seam roofing plates.

A—Collar of Cleat for inside seam. B—Nailing foot. C—Inside folding arm. D—Arm in perpendicular position. F—Applied to inside standing seam. G—Nailing foot. E—Inside sheet. H—Outside sheet. When all are in place, the seam to be squeezed together.

A—sheet proper. B—Inside double seam. C—Inside ½ double seam closed with tongs. D—Tongue of cleat. E—Shoulder of cleat. F—Nailing front of cleat.

Fig. 11



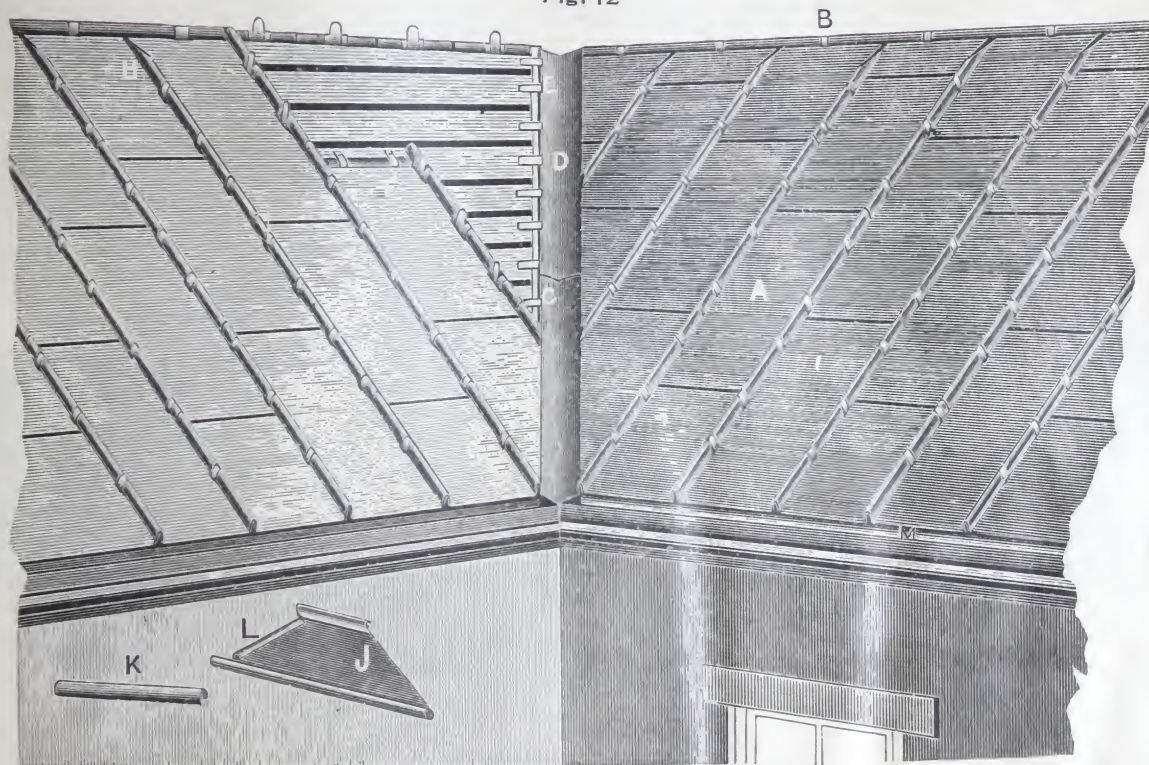
Shows how to lay Pressed Standing Seam Roofing on a double-pitch roof

Explains the method of laying Pressed Standing Seam Roofing on a pitch roof and the manner of forming the comb without the use of any extra pieces. It also shows the method of securing the edges at sides of roof. A—Side of roof completed. B—Ridge or comb as it appears when completed. C—Standing Seam hammered down and formed into comb. D—Extreme end of sheet, having 2 inch margin turned up to form comb. E—Opposite side of upper end of sheet turned up 1 inch, over this is folded 1 inch of the sheet on the opposite side of roof, as in D. This folding of the end of sheet over the opposite one forms a solid ridge cap all from the sheets proper, and only requires a little careful and patient work to accomplish it. F—Sheet formed ready to place in position on roof. G—2 inch seam turned for comb. H—End cleats in position at upper end joint of lower sheet. I—End joint formed on lower end of sheet ready to hook into upper joint of sheet H. This finishes the laying, and, when done with care, makes one of the most perfect and desirable roofs ever laid.



# ROOF WITH VALLEY AND BOX GUTTER

Fig. 12



Shows manner of laying Pressed Standing Seam Roofing on buildings having a valley

A—One side finished. B—Comb finished. This is formed from the sheet and fastened with our tongued cleats, with the exception of the cap, which is made from a scrap of iron 2 inches wide, as in K, bent in a V shape (or we can send these caps in 8 feet lengths already formed, when given the length of comb or ridge). The cap is placed over Standing Seam at ridge after the roofing is laid. Bend the tongue of cleat over cap and squeeze together with tongs same as when closing side seams. The Standing Seam is hammered over, commencing about 6 inches down from end of sheet, as in H, same as if forming a ridge finish. C—Shows cross joint in valley. D—Valley laid complete. E—Side of valley cleated to sheathing and leaving edge turned ready to receive roofing sheets. F—Roofing sheets turned at end and cleated. G—Sheet hooked into valley, locked and hammered down. H—Standing Seam hammered down to allow of turning up of one inch to form Standing Seam for ridge cap. J—Sheet all formed to fit in valley, showing how mitre is cut. L—End joint formed on upper end of sheet. K—Ridge cap. By following the plan of laying as explained above, you will secure a roof that is perfect.



# How to Prepare Roofing for Flashing

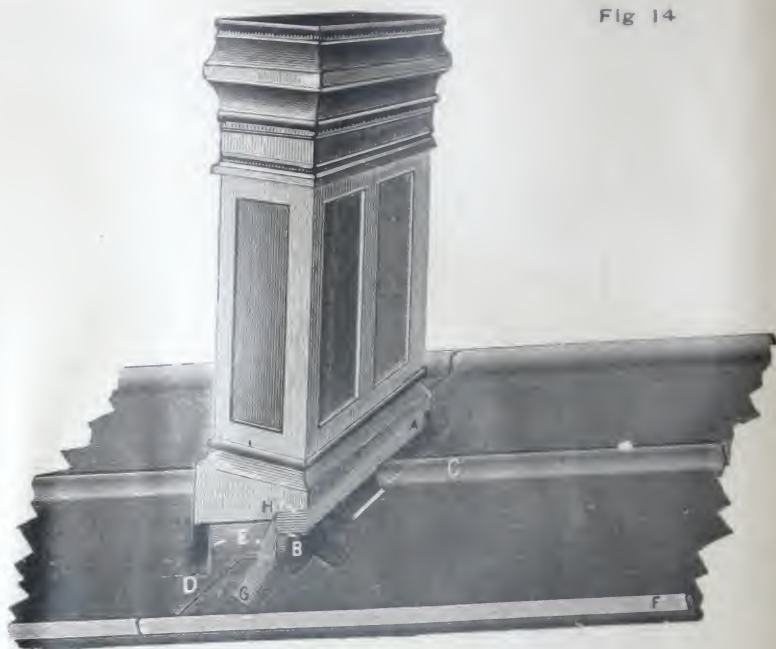
## AROUND SKYLIGHTS AND CHIMNEYS

Fig. 13



Shows sheet prepared to fit around chimney, scuttle, or skylight frames.

Fig. 14



Shows mode of flashing around chimneys, skylights, frames, etc.

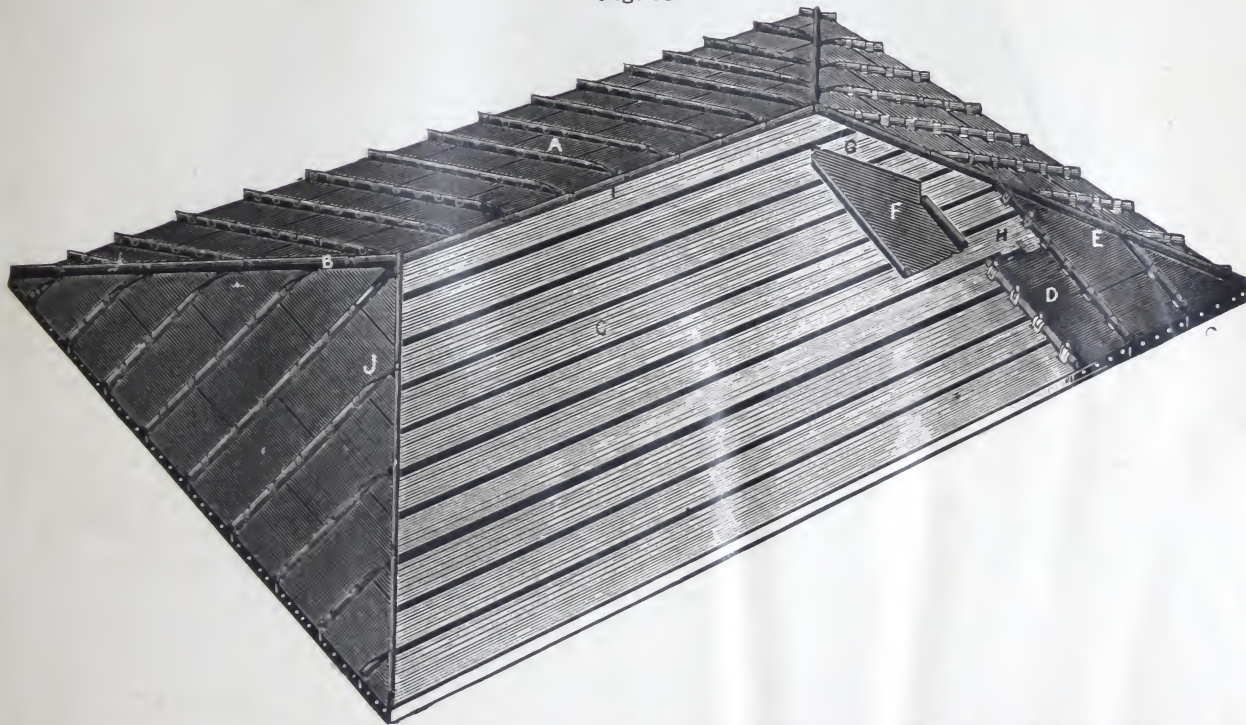
A and E—Flashing turned from main sheet. D—Cross joint. C—Standing Seam closed. B—Fiber patch to cover opening at cut corners. F—Standing Seam.

Fig. 14 shows how flashings around chimneys and frames are made. A—Metal flashing turned against the brick chimney. B—Manner of cementing cut corner, this is done by using our fiber, patches and iron cement, (superior to lead solder), after the corners are treated, then take a strip of fiber, spread it with the paste, and divide it between the upper edge of iron flashing and brickwork, pat it smooth and work the edges of fiber out well into the cement, both on to the iron and brick surfaces; then paint over the fiber lightly, so that the flashing is well filled with paint, and after the roofing is all laid, flashing completed, proceed to paint the entire roofing, and give all patching and flashing a second coat. The flashing will outlast any lead solder, and make perfect contact of the metal to either stone, brick, or wood. Always put the corner pieces on first, well covered with cement, and patted out smooth as in letter B. Then counter flash all around, as above given. More leaks occur around parapet wall, chimneys, and frames than any other part of the roof, from all kinds of roofing, be it tin, iron, slate, or shingles, and our mode of flashing and patching is the most effectual ever tried. It has stood the test for over 16 years.



# DOUBLE HIP AND RIDGE ROOF

Fig. 15



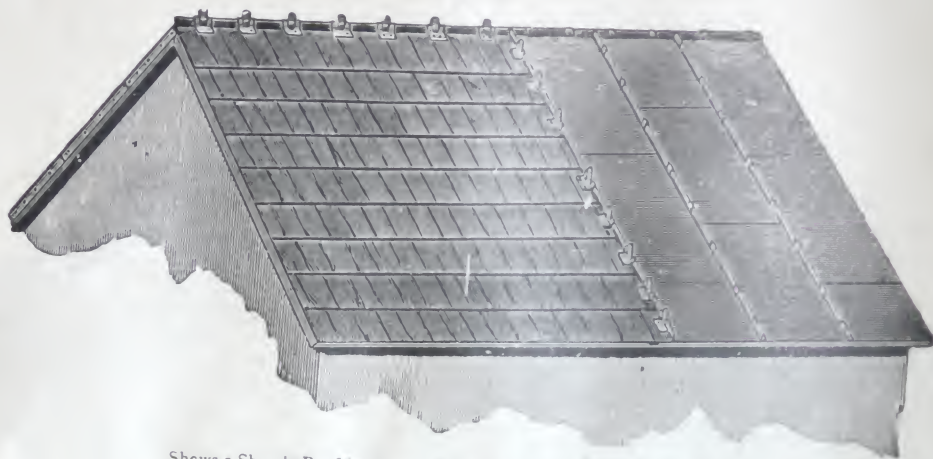
Shows manner of laying our Pressed Standing Seam or Roll Cap Steel Roofing, on a roof having 4 hips and a ridge.

A—One side laid complete. B—One hip formed and finished. C—Hip half laid and turned one inch. D—Sheet laid and cleated at side and upper end. E—Sheet fitted at hip and cleated at side and turned over at hip and finished. F—Sheet all prepared with mitre for hip, lower joint turned to hook into sheet D. G—Upper end turned two inches to form hip finish, turned one inch over the adjoining inch turned on opposite side half finished. H—Sheet cleated to upper end. I—Ridge comb finished one-half. J—One side of roof complete with hip finished on one side, and the other side ready for adjoining sheets, as the remaining side unroofed is being covered and closing up the work, all mitred pieces cut from sheets at one side can be used without loss by applying them on the opposite side. A good workman will watch this part, and, if careful, can lay a roof of this kind without any loss, while a careless and ignorant one would waste 25 per cent.



# Standing Seam Laid Over Shingles

Fig. 16



Shows a Shingle Roof being covered with our Standing Seam Steel Roofing.

This is no experiment, as our roofing over shingles has been tested for the past fifteen years, and found to be the only practical covering for old shingles. It is cooler in summer and warmer in winter, and prevents condensation on the under side of iron. The iron is laid the same over shingles as it would be on sheathing, with one exception, viz.: use six-penny nails to fasten the cleat to shingles instead of wire or shingle nails. Cheaper than slate, tin, or reshingling, and will outlast either of them; saves insurance and danger from fire. Our Pressed Standing Seam Steel Roofing is the only steel roofing on the market that can be economically laid over shingles. It does not require any extra carpenter work, or make any litter around the premises. This manner of laying iron on old buildings or buildings where the shingle or composition roofs have become deteriorated and worthless is becoming very popular, as it saves the annoyance and expense of removing the old roof. Also reduces danger from fire caused by sparks and lightning, saves insurance, makes a neat and gainly appearance. The water from this kind of roof is more desirable, both for drinking and washing purposes; no vegetable matter can accumulate and rot on the roof and then be washed into the cistern, but with steel roofing the wind keeps it clean and smooth.

What constitutes a square of Standing Seam Steel Roofing.



- 6¼-8 ft. or 5-10 ft. sheets 24 in. wide, painted both sides.
- 1 pound Cleats.
- ½ pound Barbed Wire Nails.
- 15 pound of End Cleats.
- 2 pounds Dry Iron Paint.
- Boxed and delivered on car or boat.



# Rules of Measurement

## In Selling Sheet Metal Building Material

All Iron and Steel Roofing, Siding, Ceiling, etc., except Galvanized material, is painted both sides unless otherwise ordered.

All Iron and Steel Roofing, Siding and Ceiling are sold by the square (100 square feet), except Corrugated Iron, which is sold by the square or pound, as preferred.

A SQUARE consists of 100 square feet, and is calculated by the following rules of measurement:

**Corrugated (Iron or Steel) and Imitation Brick, Beaded Weather Boards.**—The full width and length of sheets, after being corrugated or formed, is calculated.

**V Crimped (Iron or Steel).**—The full length of sheets, together with the actual covering width, is calculated.

**Standing Seam Steel Roofing.**—The actual covering width and full length is calculated, whether the sheets are connected by end-locks and shipped in rolls, or be separate and shipped in crates.

**Wide Gutters and Valleys.**—The full width and length of material is calculated.

**Nails, Wood Strips, Dry Paint.**—(The amount generally required in applying a square) are included in the price quoted on the Sheet Iron or Steel.

**Ridge Roll, Ridge Cap, Corrugated Wood Strips, Corner Boards, Panel Strips, Window and Door Case Coverings, Mouldings, Stylings, Eaves Trough, Conductor Pipes, Etc.,** are sold by the lineal foot, and not included in prices quoted on Sheet Iron and Steel, but when furnished are charged separately.

## WEIGHTS

The weights of Iron and Steel Sheets before being painted are based on U. S. STANDARD GAUGE as follows:

No. of Gauge . . . . .	28	27	26	24	22	20	18	16
Weight per square ft. . . . .	625	6875	.75	1.00	1.25	1.50	2.00	2.50 lbs.

No. 28 is always shipped when the gauge wanted is not specified

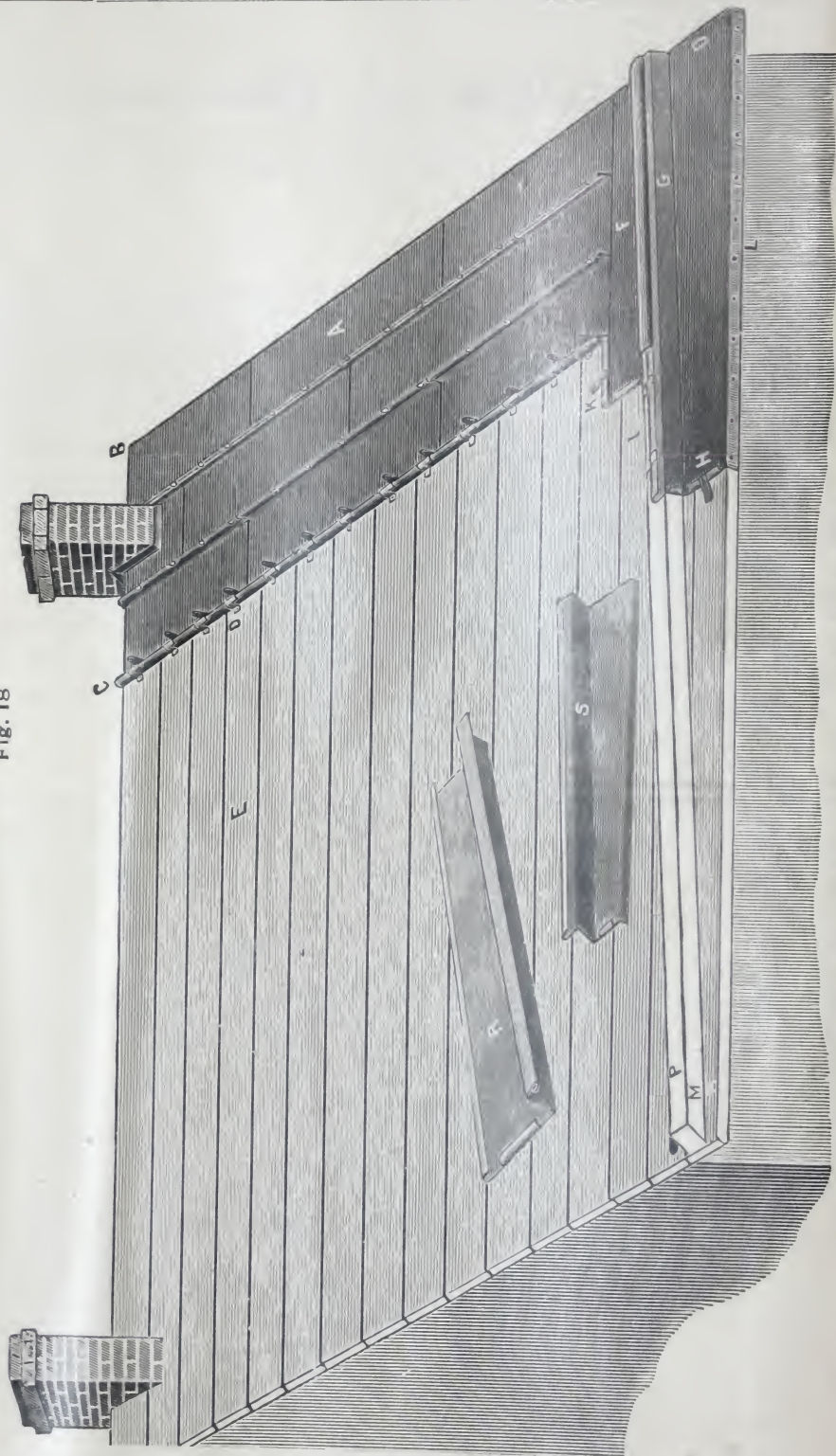
### Approximated Weights Corrugated, Beaded and V Crimp

	No. 28	No. 27	No. 26	No. 24	No. 22	No. 20	No. 18	No. 16
Painted . . . . .	69 lbs	77 lbs	84 lbs	111 lbs.	138 lbs.	165 lbs.	220 lbs.	275 lbs.
Galvanized . . . . .	86 lbs.	93 lbs	99 lbs.	127 lbs	154 lbs	182 lbs.	236 lbs	291 lbs
PAINTED					GALVANIZED			
Weather Boarding . . . . .	No. 28, 74 lbs.				No. 28, 91 lbs.		No. 27, 98 lbs.	
Standing Seam . . . . .	No. 28, 71 lbs				No. 27, 78 lbs.		No. 28, 89 lbs	
Roll and Cap . . . . .	No. 28 74 lbs				No. 27, 82 lbs		No. 28, 91 lbs	
					No. 27, 98 lbs.			
					No. 28, 91 lbs		No. 27, 98 lbs.	



How to Cover a Yankee Gutter and put in  
 Valley with our Roll Steel Sheets, and connect any of our  
 different styles of Standing Seam Roofing to same with utmost safety.

Fig. 18

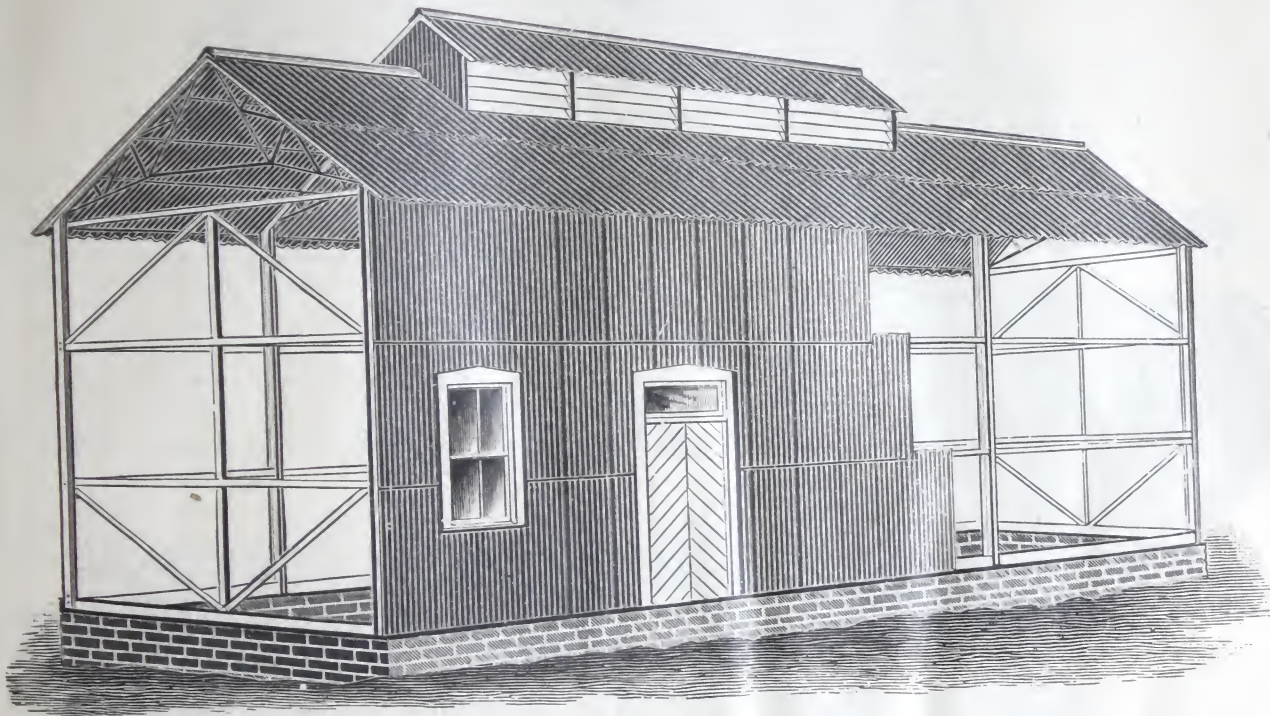


Shows the mode of applying our Pressed Standing Seam and Tongue Cleat, also covering a Yankee Gutter.





Fig. 19



Shows application of Corrugated Sheets to Truss Roof and sides of an iron or wood frame building.

For a cheap, durable, fireproof covering, Corrugated Sheets is unequalled and is extensively used all over the country for all kinds of buildings, porticos, awnings, etc.

If parties ordering Corrugated Sheets will give exact length of rafter and width of roof as per diagram, pages 36 and 37, we can often send sheets of right length to fit roof and thus save labor, cutting and waste of material.



## DEPARTMENT SECOND

## ROLL AND CAP STEEL ROOFING

## USING TONGUED METAL CLEAT

Patented October 14, 1884, and January 16, 1885

Fig. 22



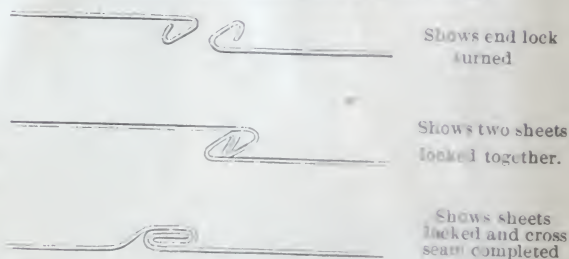
Shows the Roll Cap Steel Roofing and Trimmings

## A WORD ABOUT CROSS SEAMS

Every mechanic who has laid Roll Roofing has found that the old style of angle locked cross seams would come apart when he began to tong up the Standing seam, which not only delayed him in completing the work, but made it impossible to make a strictly watertight job.

Our Double Locked Cross Seams cannot come apart and will never leak.

## Construction of Double Locked Cross Seams



1—Metal Cap 8 ft. long 2—Roll of Sheet Steel Roofing 3—Metal Cleat as shipped. 4—Metal Cleat formed ready to place in position against Roofing Sheet, Standing Seam (Fig. 23, letter B)

We would especially call your attention to our *Metal Caps*. We furnish them in 8 ft. pieces, while all other Roofing Companies supply them in lengths of 30 inches or under. One great advantage our Roofing has over all other Roll Cap Roofing is, that the cap is held to the roofing sheet standing seam by means of our Tongued Metal Cleat. Other devices either indent the cap or rivet it, both of which methods are very unsatisfactory, as in a short time they become loosened and blow off, thus causing leaks. This style of roofing being so simple, extra skill is not required to lay it, and it can be laid as rapidly as other styles of roofing.

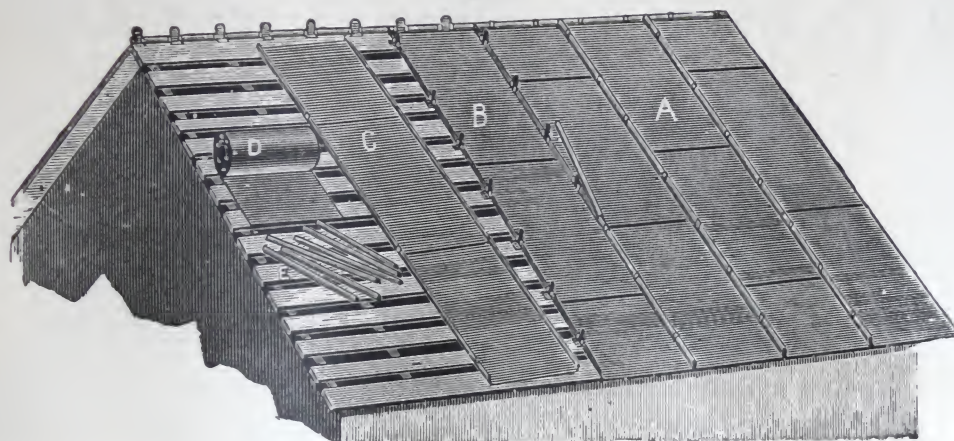
This is a very desirable roof where buildings have the roof pitched one way only, with only a slight fall and long courses. We offer you the best Roll Cap Roofing ever made. Give us a trial order.

This style of Steel Roofing is especially adapted to flat roofs. Wherever flat seam, tin or gravel can be laid (2 in. fall to the foot), this roofing can be applied. Each roll, as shipped, contains 100 square feet after the standing seam is turned. This is formed by a special tool which we furnish, or by using tinner's combing tongs. These rolls are made up of 6 sheets, 8½ ft. long, or 5 sheets 10 ft. long, swaged together. The joints are neatly and closely made. With this roofing we also furnish trimmings to complete its laying. We furnish the most perfect, simple, most easily and rapidly laid Roll Cap Roof on the market. We use in this, as in our other style of roofing, the very best quality of roofing, the very best quality of double worked, extra soft boxed annealed steel.



# ROLL AND CAP ROOFING APPLIED

Fig 23

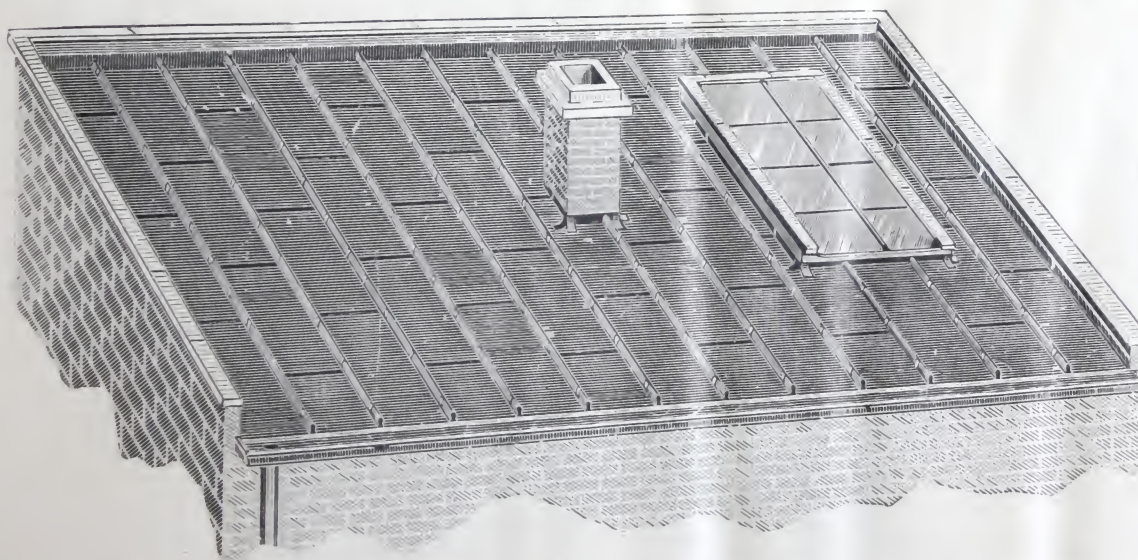


Shows this style of Roofing in course of laying

A—Roofing finished. B—One course placed against another, with Metal Cap partly placed and ready for the tongue of Cleat to be pressed over Cap and squeezed together. C—Course prepared ready to be placed in position, standing edges all turned. D—Roll of Roofing E—Metal Roofing Caps.

The method of making hips, combs and valleys is just the same as described in Figs 9, 11, 12, 15, and 27.

Fig 24



Shows the application of our Roll Cap Steel Roofing on a flat store building, less than 2 in. fall to the foot. We also show parapet wall flashings, chimney flashings, skylight frame flashings, and roofing sheets hooked into iron box gutters.



What constitutes a square of Roll Cap Steel Roofing: One roll (6 sheets, each 26 x 102, or 5 sheets, each 26 x 120), making 50 running feet, painted both sides; 50 lineal feet of Metal Cap, 1 pound Metal Cleats,  $\frac{1}{2}$  pound Wire Nails, and 2 pounds Dry Iron Paint; shipped in rolls.



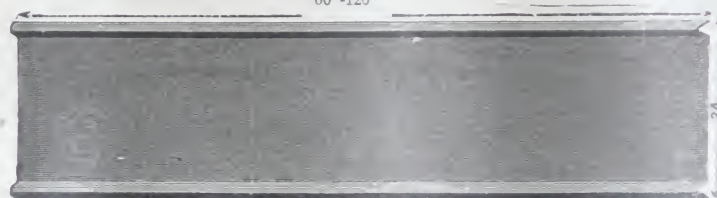
## DEPARTMENT THIRD

# V CRIMPED IRON ROOFING

(OLD STYLE)

Fig 25.

60"-120"



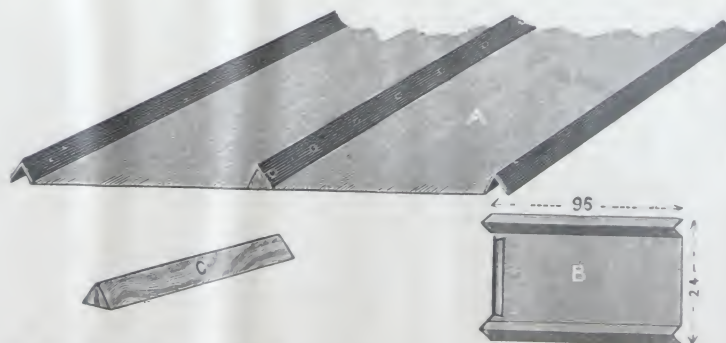
Shows V Crimped Roofing as shipped

This style of Iron Roofing has been used more extensively than any other kind; in fact, the sales of all other styles combined would not equal the sales of the V Crimped. The fact that it is the oldest device used for putting on sheet iron roofing explains why so much is used and why it is so well known. The manufacture of iron roofing for a number of years was confined to one or two firms, and the principal consumers were large manufacturing firms, individuals not adopting its use until within a recent period, as they confined themselves to the use of slate, tin and shingles for covering dwellings, warehouses, barns, etc. However, within a few years, numerous patents for improved roofing devices have been issued. Inventors have given this subject great study and spent large sums of money in machinery and experiments, and now various styles of Iron Roofing are furnished by many firms, working under different patents, **all of which far excel the V Crimped.** Iron Roofing, to be effective, should possess the following points: 1st. Be so constructed as to resist the elements. 2d. Be easily applied. 3d. Be cheaply applied. 4th. Be so constructed as to avoid waste in fitting angles, valleys, and around openings.

There is but one series of Iron Roofing devices ever yet offered to the public that combines all these essential points, and these are manufactured by us under the Sagendorph patents.

For Shedding, or for cheaply constructed buildings, the V Crimped Roofing will answer, although we do not recommend it for general use. It has many serious faults that are overcome only by not using it at all, but by using our various devices, as described in Departments 1 and 2 of this Catalogue.

Fig 26.

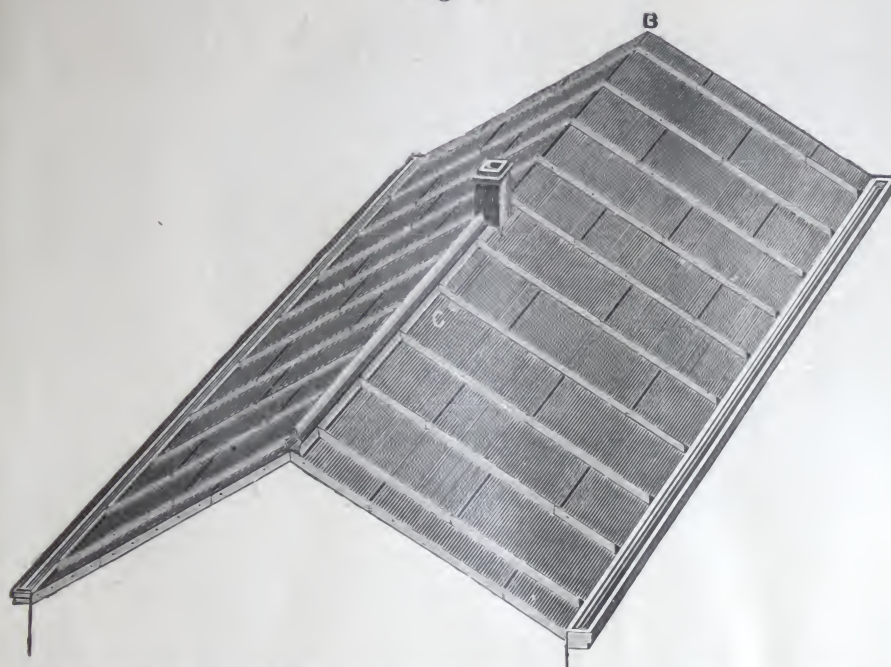


Shows V Crimped Roofing (old style) using V Stick Center. A—Represents manner of laying Sheets upon sheathing, slats or rafters. B—Sheet Crimped. C—Wooden strips used between the V Crimps to stiffen them, and allow for driving nails through the Sheet to fasten Sheets and Stick to sheathing or rafters.

Our V Crimped Roofing has the crimps so made as to approach a Standing Seam, thus binding the sheets firmly at the edge, in addition to the nailing. This, in a measure, prevents loosening by contraction and expansion and the leaking of the water over the seams, thus making *our manufacture* of this style of roof the most desirable to use when one wishes to use a V Crimped Roofing at all.

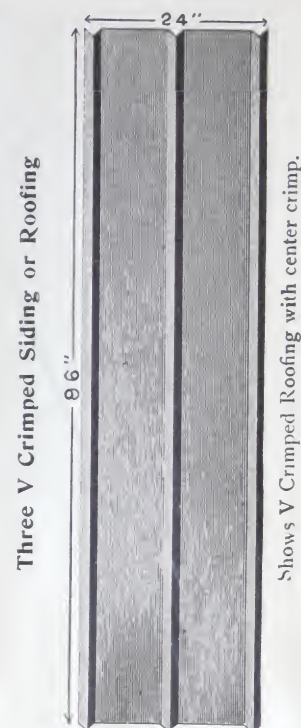


Fig. 27



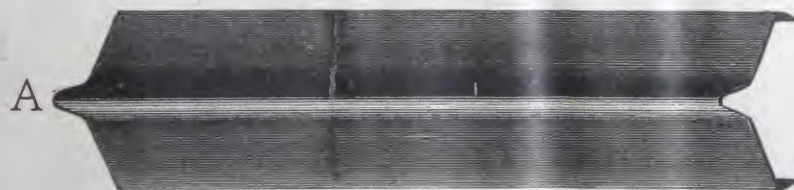
Shows application of V Crimped Roofing on dwelling roof and comb finish with metal cap.

Fig. 21



A—Metal Cap made in lengths of 2 to 8 ft., and shipped as in Fig. 28. V cut openings are made in the cap after the roofing is laid, as the crimps in the roofing run in courses, do not terminate alike on opposite sides of pitch roof at comb, therefore it is desirable to have the cap solid at edges, and let the workmen fit the cap on the ridge after the roof is laid, mark the places on both sides to be cut out, then take the snips and cut a V piece out, this will allow the cap to fit nicely over the crimps and provide a perfect capping for ridge, keeps out the wind and rain, and also makes a fine and durable finish. B—Two sides of the roof laid to ridge showing the crimp and ends of sheet meeting. C—Combing Cap cut out and applied. To fit one joint of combining cap at ends over an adjoining one, snip the ends in two inches, nail in the two inch flange and then slip the next piece without cutting into the snipped end, this will form a slot cut joint, covering the nails and prevent leakage from rain. This cut shows the roofing hooked into a box gutter, as in figs. 10 and 12.

Fig. 28



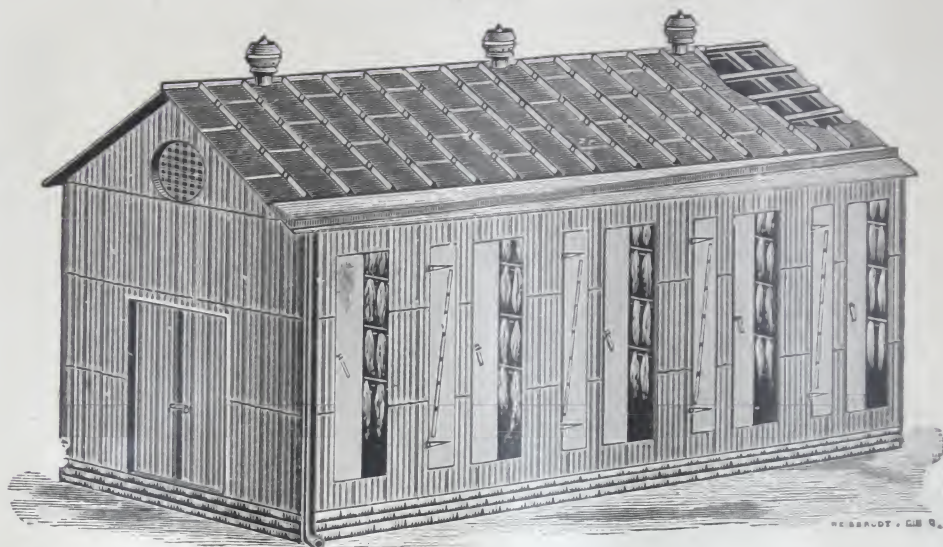
96 Inches long.

Shows Metal Combing Cap, used with pressed standing seam and V crimped to finish Ridge and Hips.

The above Capping, made to order, in odd sizes, to suit the building for which it is to be applied.



Fig. 29



Shows Iron Tobacco Barn or Warehouse covered with V Crimped Iron Roofing and Corrugated Iron Siding.

Tobacco cured in Iron Buildings increases in value from 15 to 20 per cent. In other words, the difference in the price of tobacco cured in an Iron Building will pay for the iron in from five to seven years.

At the low prices which have been prevailing during the last two years for leaf tobacco, it behooves farmers and re-dryers of tobacco to put their goods in such shape that they will command the highest prices to insure a profit. This end can only be secured by building warehouses in the manner shown. The burning of tobacco barns is of common occurrence, causing the rate of insurance to be placed high. The insurance can be reduced fully one half by using Iron, as the buildings so constructed are fire proof, and cannot be destroyed by either lightning, spontaneous combustion or incendiarism.

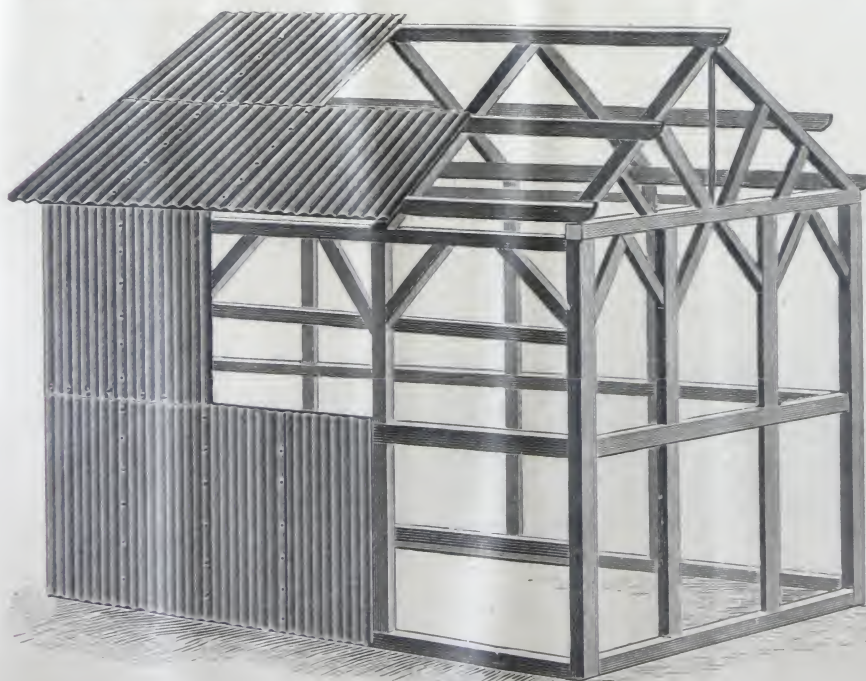


Fig. 30





Fig. 31

Where to nail for roofing, which are proper in applying Corrugated Sheet, No. 1 A—Beginning of sheet, B and C—Lap of 1½ corrugations, D—Ending of sheet, E—Top of corrugations, F and G—Show half corrugation lap for siding, C and D—Siding. Always break cross joints if possible, and lap side seam as in No. 1, for roofing and as in No. 2 for siding commence at right hand of roof and lay to the left, and from eaves to comb, never across the roof, but as in Fig. 63.



No. 1

No. 2



Shows a building covered with corrugated sheets, sides and roof.

A—O G. Hanging gutter No. 3. B—Gutter straps. C—Braces and cornice finish. D—Sheets project at bottom 3 inches over eaves into gutter. E—Corrugated sheet side lap 1½ corrugations. F—Inside or under corrugations of last sheet laid. G—Cross lap 3 inches and nailed on top of corrugation, using lead washer, Fig. 135. H—Four inch square corrugated downfall, Fig. 632. J—Studding. K—Where to nail sheets to fasten them to studding. L—Nailing point for siding sheets put on perpendicular as desired. O—Cross slits, put 2 feet apart. P—Studding, 4 feet apart. Q—Steel corner board, Fig. 125. R—Siding cap. Fig. 140. S—Brick chimney and out fiber flashing finish. page 47.



# Rules for Measuring

## After the Material is Applied to Building

**Roofs.**—Measure the length of the roof, including the amount turned up or down at each end or gable, and multiply by the distance from eave to eave, including the material used in the ridge seam, and the material lapped either down or up at eaves

**Roofs with Hips, Valleys, Dormers, Etc.**—Measure each section through the center horizontally and multiply by the length of the strip of metal at the center, and in addition to the actual surface of the roof, measure the length of hips and valleys by one foot wide. The extra measure of hips and valleys is to compensate for the extra labor and loss of material in cutting, fitting and laying same.

**Openings.**—Make no deduction for openings, chimneys, stacks, skylight, dormer window or ventilator, unless such openings measure more than 50 square feet; if more than 50 square feet, and not more than 100 square feet, deduct half the size of the opening; if more than 100 square feet, deduct the full size of the opening.

The labor to flash pipes and round stacks, whether of brick or iron, is charged extra.

The reason for not deducting otherwise than as specified is, that the waste of material and extra work in cutting and fitting the material for flashing such openings, is equal to or greater, than the value of the materials cut out.

**Gutters and Valleys.**—Multiply full length by full width of girt.

**Siding.**—Multiply full length of each section by the height. **DEDUCTIONS**—Make no deductions for any window, door or other opening, unless said opening measures more than 10 square feet, if more than 10 square feet, and not more than 25 square feet, deduct one-half of such openings. If more than 25 square feet, deduct all of such openings, except when the wood casings to the windows, doors and other openings are to be covered with iron or steel casings, in such instances, no deductions for openings are to be made, whether the openings be more or less than 10 square feet.

**Gables.**—To estimate contents of gables, multiply the width by one-half the height, or multiply the height by one-half the width.

**Corner Strips**—Are charged extra by the lineal foot; the cornice is charged extra in all instances, as the price varies according to the girt of material used and style of the same.

**Eaves Trough and Conductor Pipes.**—Measure the entire length and add one foot extra for each Miter, Shoe or other angle.

**Flashings.**—Measure all material used necessarily, including unavoidable waste, except where no deductions are authorized for openings.

**Ceilings.**—Multiply the length of each section by the width; separate mouldings, panel division strips, stylings, cornices and friezes are calculated by the lineal foot, extra; rosettes and other ornaments are charged by the piece; painting other than first coat is always charged extra. Make no deductions for openings measuring less than 10 square feet; if more than 10 square feet, deduct the full size.

**Scaffolding.**—Where scaffolding is necessary, the customer is to furnish all necessary materials for same free of charge, and the roofer is to construct the scaffolding free of charge.

**Domes, Spires, Doors, Etc.**—Measure all material necessarily used, including waste; charge for it at its value, together with cost of labor, applying the material at wages agreed upon.



**NET PRICE OF GALVANIZED SHEET IRON**

The table printed below gives the net price of Galvanized Sheet Iron of the gauges in common use at discounts from 65 per cent. to 85 per cent. from the present list. The gauges, based on weights, are according to the United States standard which came into effect July 1, 1893, the black iron being 2½ oz. per square foot lighter than the galvanized sheets of the same number as given in the table.

No.	10	12	14	16	18	19	20	21	22	23	24	25	26	27	28	29	30
List price per lb. ....	12c.	12c.	12c.	12c.	13c.	13c.	13c.	13c.	14c.	14c.	14c.	15c.	15c.	16c.	17c.	19c.	21c.
Ounces per sq. ft. ....	92½	72½	52½	42½	34½	30½	26½	24½	22½	20½	18½	16½	14½	13½	12½	11½	10½
Pounds per sq. ft. ....	5.78	4.53	3.219	2.636	2.156	1.906	1.656	1.53	1.406	1.29	1.16	1.03	906	8437	7812	7187	6562
List price per sq. ft.	69.36	54.36	38.62	31.57	25.02	24.77	21.52	19.59	19.68	17.92	16.15	15.45	13.59	13.49	13.25	13.65	13.78
DISCOUNT.																	
65%.....	Per lb. ....	4.2	4.2	4.2	4.2	4.55	4.55	4.55	4.55	4.9	4.9	4.9	5.25	5.25	5.6	5.95	6.35
	" sq. ft.	24.27	19.02	13.52	11.14	9.81	8.67	7.53	6.96	6.89	6.27	5.66	5.40	4.75	4.72	4.65	4.82
65 & 5%.....	" lb. ....	3.99	3.99	3.99	3.99	4.32	4.32	4.32	4.32	4.65	4.65	4.65	4.98	4.98	5.32	5.65	6.31
	" sq. ft.	23.06	18.07	12.54	10.59	9.31	8.23	7.15	6.61	6.53	5.95	5.37	5.13	4.51	4.49	4.41	4.58
65 & 10%.....	" lb. ....	3.78	3.78	3.78	3.78	4.09	4.09	4.09	4.09	4.41	4.41	4.41	4.72	4.72	5.04	5.35	5.98
	" sq. ft.	21.85	17.12	12.16	10.03	8.82	7.79	6.77	6.25	6.20	5.64	5.09	4.86	4.27	4.25	4.18	4.33
67½%.....	" lb. ....	3.90	3.90	3.90	3.90	4.22	4.22	4.22	4.22	4.55	4.55	4.55	4.87	4.87	5.20	5.52	6.17
	" sq. ft.	22.54	17.66	12.55	10.36	9.10	8.04	6.99	6.45	6.39	5.82	5.26	5.01	4.41	4.38	4.31	4.47
67½ & 5%.....	" lb. ....	3.70	3.70	3.70	3.70	4.01	4.01	4.01	4.01	4.32	4.32	4.32	4.63	4.63	4.94	5.24	5.86
	" sq. ft.	21.35	16.76	11.91	9.82	8.64	7.64	6.64	6.13	6.07	5.53	4.99	4.77	4.19	4.16	4.09	4.25
67½ & 10%.....	" lb. ....	3.51	3.51	3.51	3.51	3.80	3.80	3.80	3.80	4.09	4.09	4.09	4.38	4.38	4.68	4.97	5.59
	" sq. ft.	19.75	15.49	11.30	9.32	8.19	7.24	6.29	5.81	5.75	5.23	4.73	4.51	3.95	3.95	3.88	3.99
70%.....	" lb. ....	3.60	3.60	3.60	3.60	3.90	3.90	3.90	3.90	4.20	4.20	4.20	4.50	4.50	4.80	5.10	5.70
	" sq. ft.	20.81	16.31	11.59	9.56	8.41	7.43	6.46	5.96	5.90	5.37	4.85	4.63	4.07	4.05	3.98	4.09
70 & 5%.....	" lb. ....	3.42	3.42	3.42	3.42	3.70	3.70	3.70	3.70	3.99	3.99	3.99	4.27	4.27	4.56	4.84	5.48
	" sq. ft.	19.76	15.49	11.01	9.08	7.97	7.05	6.12	5.66	5.61	5.10	4.61	4.40	3.87	3.84	3.75	3.89
70 & 10%.....	" lb. ....	3.24	3.24	3.24	3.24	3.51	3.51	3.51	3.51	3.78	3.78	3.78	4.05	4.05	4.32	4.59	5.18
	" sq. ft.	18.72	14.67	10.43	8.60	7.57	6.69	5.81	5.37	5.31	4.84	4.37	4.17	3.67	3.64	3.58	3.68
72½%.....	" lb. ....	3.30	3.30	3.30	3.30	3.57	3.57	3.57	3.57	3.85	3.85	3.85	4.12	4.12	4.40	4.67	5.22
	" sq. ft.	19.07	14.95	10.62	8.76	7.69	6.80	5.91	5.46	5.41	4.93	4.45	4.24	3.73	3.71	3.65	3.75
72½ & 5%.....	" lb. ....	3.13	3.13	3.13	3.13	3.39	3.39	3.39	3.39	3.65	3.65	3.65	3.91	3.91	4.18	4.44	4.96
	" sq. ft.	18.09	14.18	10.07	8.31	7.30	6.46	5.61	5.18	5.13	4.67	4.23	4.02	3.54	3.52	3.47	3.56
72½ & 10%.....	" lb. ....	2.97	2.97	2.97	2.97	3.21	3.21	3.21	3.21	3.46	3.46	3.46	3.71	3.71	3.96	4.20	4.70
	" sq. ft.	17.16	13.45	9.56	7.89	6.92	6.12	5.31	4.91	4.86	4.43	4.01	3.82	3.36	3.34	3.28	3.37
75%.....	" lb. ....	3	3	3	3	3.25	3.25	3.25	3.25	3.50	3.50	3.50	3.75	3.75	4	4.25	4.75
	" sq. ft.	17.34	13.59	9.65	7.97	7	6.19	5.38	4.97	4.92	4.48	4.04	3.86	3.39	3.37	3.32	3.41
75 & 5%.....	" lb. ....	2.85	2.85	2.85	2.85	3.08	3.08	3.08	3.08	3.32	3.32	3.32	3.56	3.56	3.80	4.03	4.51
	" sq. ft.	16.47	12.91	9.17	7.57	6.64	5.87	5.10	4.71	4.66	4.25	3.84	3.66	3.22	3.21	3.15	3.24
75 & 10%.....	" lb. ....	2.70	2.70	2.70	2.70	2.92	2.92	2.92	2.92	3.15	3.15	3.15	3.37	3.37	3.60	3.82	4.27
	" sq. ft.	15.60	12.27	8.69	7.17	6.29	5.56	4.83	4.46	4.43	4.03	3.64	3.47	3.05	3.03	2.98	3.07
77½%.....	" lb. ....	2.70	2.70	2.70	2.70	2.92	2.92	2.92	2.92	3.15	3.15	3.15	3.37	3.37	3.60	3.82	4.27
	" sq. ft.	15.60	12.23	8.69	7.17	6.28	5.56	4.83	4.46	4.43	4.03	3.64	3.47	3.05	3.03	2.98	3.07
77½ & 5%.....	" lb. ....	2.56	2.56	2.56	2.56	2.77	2.77	2.77	2.77	2.99	2.99	2.99	3.20	3.20	3.42	3.63	4.06
	" sq. ft.	14.79	11.59	8.24	6.80	5.97	5.28	4.58	4.24	4.20	3.82	3.45	3.29	2.90	2.88	2.83	2.91
77½ & 10%.....	" lb. ....	2.43	2.43	2.43	2.43	2.63	2.63	2.63	2.63	2.83	2.83	2.83	3.03	3.03	3.24	3.44	3.84
	" sq. ft.	14.04	11	7.82	6.45	5.67	5.01	4.35	4.02	3.98	3.62	3.27	3.12	2.74	2.73	2.68	2.76
80%.....	" lb. ....	2.40	2.40	2.40	2.40	2.60	2.60	2.60	2.60	2.80	2.80	2.80	3	3	3.20	3.40	3.80
	" sq. ft.	13.87	10.87	7.72	6.37	5.60	4.95	4.30	3.98	3.93	3.58	3.23	3.09	2.70	2.70	2.65	2.73
80 & 5%.....	" lb. ....	2.28	2.28	2.28	2.28	2.47	2.47	2.47	2.47	2.66	2.66	2.66	2.85	2.85	3.04	3.23	3.61
	" sq. ft.	13.18	10.36	7.34	6.05	5.32	4.70	4.09	3.78	3.74	3.40	3.07	2.93	2.58	2.56	2.52	2.59
80 & 10%.....	" lb. ....	2.16	2.16	2.16	2.16	2.34	2.34	2.34	2.34	2.52	2.52	2.52	2.70	2.70	2.88	3.06	3.42
	" sq. ft.	12.48	9.78	6.95	5.73	5.04	4.46	3.87	3.58	3.54	3.22	2.91	2.78	2.44	2.43	2.39	2.45
82½%.....	" lb. ....	2.10	2.10	2.10	2.10	2.27	2.27	2.27	2.27	2.45	2.45	2.45	2.62	2.62	2.80	2.97	3.32
	" sq. ft.	12.13	9.51	6.76	5.57	4.89	4.32	3.76	3.47	3.44	3.13	2.83	2.70	2.37	2.36	2.32	2.38
82½ & 5%.....	" lb. ....	1.99	1.99	1.99	1.99	2.16	2.16	2.16	2.16	2.32	2.32	2.32	2.49	2.49	2.66	2.82	3.15
	" sq. ft.	11.50	9.01	6.40	5.28	4.65	4.11	3.57	3.30	3.26	2.97	2.68	2.56	2.25	2.24	2.20	2.26
82½ & 10%.....	" lb. ....	1.89	1.89	1.89	1.89	2.04	2.04	2.04	2.04	2.20	2.20	2.20	2.36	2.36	2.52	2.67	2.99
	" sq. ft.	10.92	8.56	6.08	5.02	4.4	3.89	3.38	3.12	3.09	2.81	2.54	2.43	2.14	2.12	2.08	2.15
85%.....	" lb. ....	1.80	1.80	1.80	1.80	1.95	1.95	1.95	1.95	2.10	2.10	2.10	2.25	2.25	2.40	2.65	2.85
	" sq. ft.	10.40	8.15	5.79	4.78	4.20	3.71	3.23	2.98	2.95	2.69	2.42	2.31	2.04	2.02	1.99	2.05



# DIFFERENT STYLES AND SIZES MANUFACTURED CORRUGATED IRON FOR GENERAL BUILDING PURPOSES.

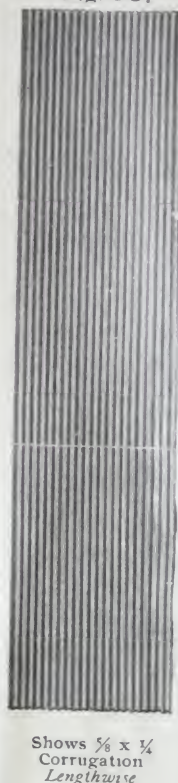
Fig. 33.



Fig. 34.



Fig. 35.



Figs 33, 34 and 35 Lengthwise

Fig. 36.



Fig. 37.



Fig. 38.



Fig. 39.

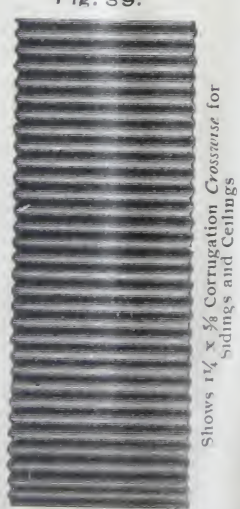
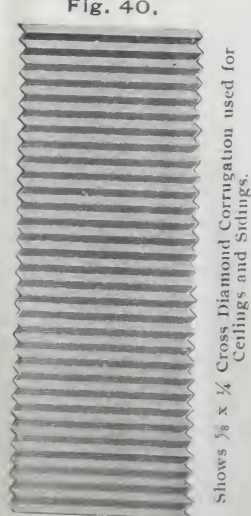
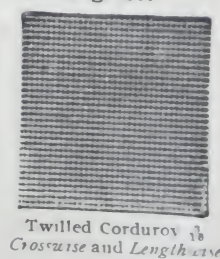


Fig. 40.



PATENTED MARCH 7, 1887.  
Fig. 41.



It is used for ornamental work in Cornice, Paneling, inside and outside work; also Fig. 37 can be worked for same purpose  
Large sheet 28 x 28

Fig. 42.





# LEAD WASHERS

Used when putting on Roofing and Siding, Corrugated or V crimped, as shown in the cut below, will prevent leaks

Fig. 43



No Corrugated or V Crimped Roofing ought to be laid without using this important and small additional cost.

These Washers make an **absolute water-tight joint** on any surface, whether concave, convex or flat; they also **prevent rust** below the nail head and the head from cutting into the sheet, thus making a more durable job. See pages 20, 26 and 82 of Catalogue for styles of Roofing to use these little preservers.

Read the following and find out how many and what kind you need; do not let the **small cost** additional per square prevent you from having a perfect job.

Put up in boxes containing 100 pounds each.

One pound contains 325 washers.

One pound will put on 2 to 3 squares.

Hole in the No. 8 Washer is  $\frac{5}{8}$  of an inch in diameter.

Hole in the No. 12 Washer is  $\frac{3}{8}$  of an inch in diameter.

Fig. 44



Clip used in fastening Corrugated Sheets to Iron Frames.

Fig. 45



Shows Iron Band for use in fastening Corrugated Sheets to Iron Purlins.

Fig. 46

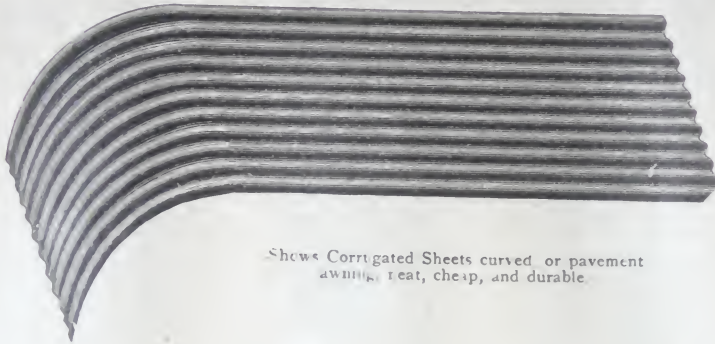


Shows Iron Stirrup used in fastening Corrugated Sheets or Iron Frames. We make them this shape of any desired size.



# ANGLE FORMS OF SHEET IRON

Fig. 48



Shows Corrugated Sheets curved for pavement awnings, rest, cheap, and durable.

Fig. 49



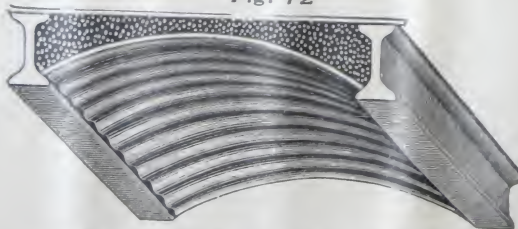
Shows Double Curved Corrugated Iron for Ventilators and Verandas.

Fig. 71



Shows a Corrugated Sheet curved.

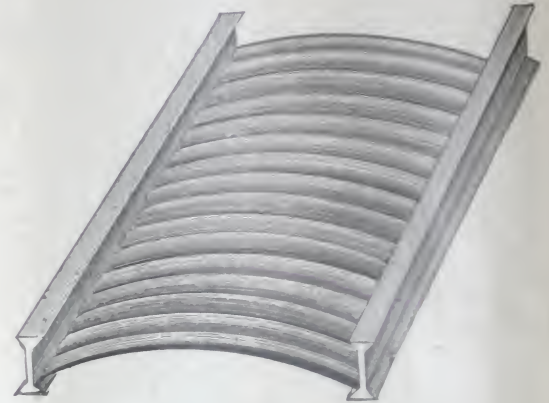
Fig. 72



Shows a section of Corrugated Iron or Steel Arch for fire-proof buildings, etc., in which our Corrugated Curved Sheets are used.

The uses of curved sheets for roofing, ceiling, and other purposes are infinite, and many will suggest themselves to the reader besides those here named.

Fig. 50



These can be curved to any desired radius, within bending capacity of the material.

We make these to specifications required, on steel or iron, and give especial attention to exactness in this kind of work, having a large patronage from the leading architectural iron works, bridge works, builders, etc.

These sheets are in very general use besides for purposes indicated, as they present a handsomely finished appearance, and often save expense in construction, *e. g.*, for lantern or ventilator roofs, dormer windows, window caps, etc.

These arches, for strength, lightness, durability, and fire proof qualities, cannot be excelled. Corrugated arches have often been tested (Trautwein) and have never shown any deflection at a pressure of 1000 pounds per square foot, and very little deflection at 2000 or 3000 pounds per square foot.

The weight of the arches, with concrete filling on top of beam, is but little over half that of a brick arch, and concrete filling same height, thus allowing fewer or lighter beams to be used, and lessening the load on the walls. These floors are from 20 to 35 per cent cheaper than those built of brick arches, or, in fact, any other fire proof floor.

Curved ceilings, when painted suitably, present a very beautiful finish, and for durability far excels plaster.



# CORRUGATED COMBING CAP AND FLASHING

CORRUGATED AND FLAT

Fig. 55



32 inches long  
Shows 2½ inch Corrugated  
Iron Combing Cap.

Fig. 56



Shows 1¼ inch Corrugated  
Iron Combing Cap.

Fig. 57



2½ inch Corrugated  
lengthwise flashing

Fig. 58



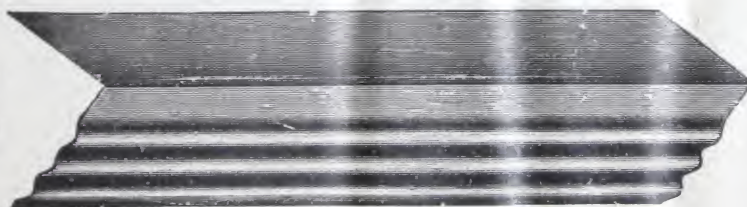
2½ inch Corrugated  
crosswise flashing

Fig. 59



1¼ inch Corrugated  
crosswise flashing

Fig. 60



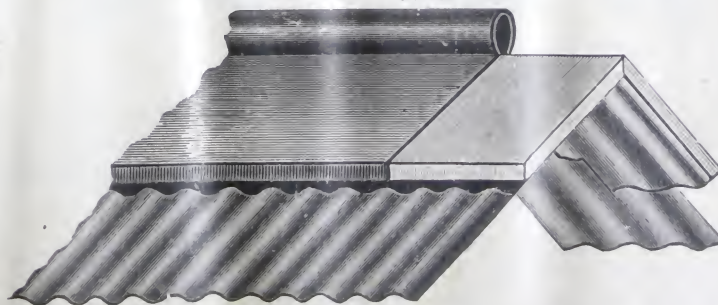
36 inches long  
1¼ inch in corrugated length-  
wise flashing

Fig. 61



Either 2½ inch or 1¼ inch corrugated margins  
for ridge cap.

Fig. 62



Shows application of our joint of corrugated wood and metal cap  
on corrugated iron roofing at ridge.



# CORRUGATED COMBING CAPS

## FLAT MARGINS

TO BE USED WITH OR WITHOUT CORRUGATED WOOD FILLER

Fig. 63

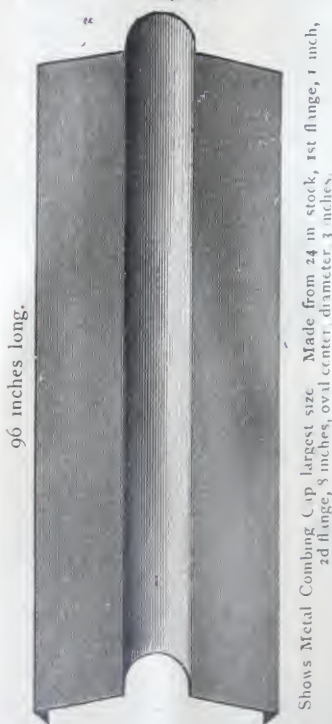


Fig. 64

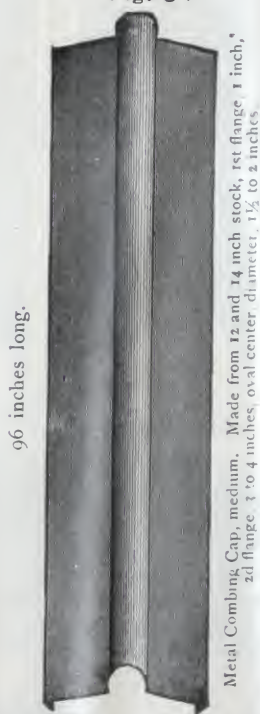


Fig. 65

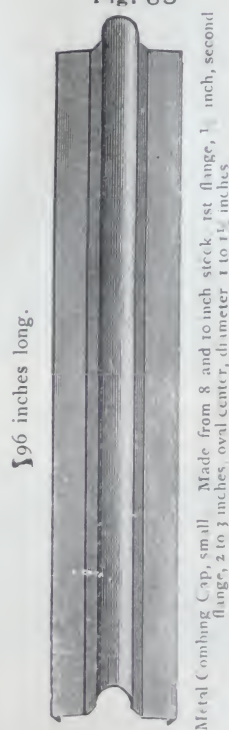
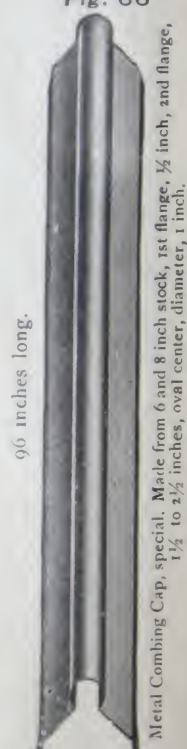


Fig. 66



Iron Ridge Cap, Fig 65 is generally used on hips of roofs. Any of the above made in 2 to 8 feet lengths of galvanized or painted iron. Iron Combing Caps are made to use on shingle, slate or iron roof hips or ridges.

Parties using Iron Roofing, either flat standing seam or corrugated Iron, do not use the Combing Cap, as a rule, and in many applications of roofing there has been a great deal of complaint in the ridge finish, both at the hips and comb, also in flashing at side walls and abutment of one building against another requires flashing. A perfect job can only be made by using some of the many styles herein shown and applying our mode of corner flashing, using fiber patch and iron cement paste.



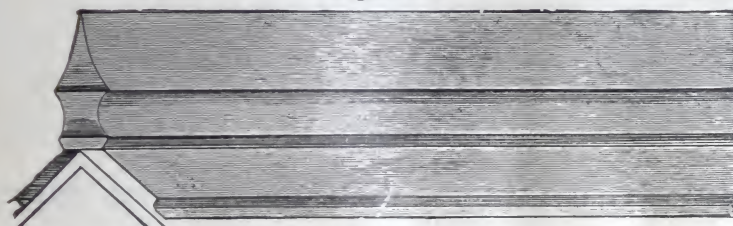
Fig. 67



Ends are charged as  
one foot.

Price per lineal foot, . . . . . 20 cents net.  
Height above Ridge, 6 inches.

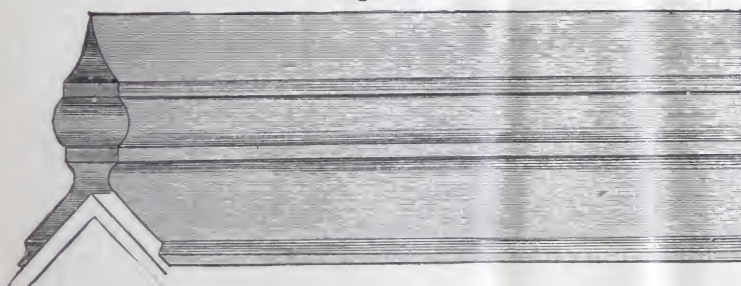
Fig. 68



Ends are charged  
one foot.

Price per lineal foot, . . . . . 25 cents net.  
Height above Ridge, 7 inches.

Fig. 69

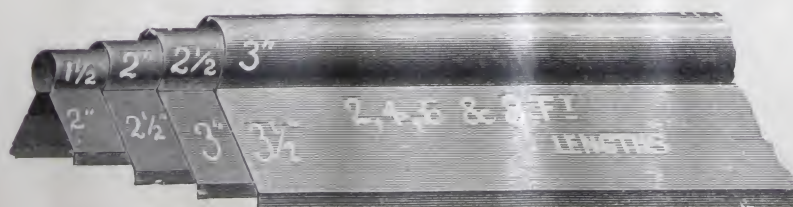


Ends are charged as  
one foot

Price per lineal foot, . . . . . 30 cents net  
Height above Ridge, 8½ inches.

*These styles are only made of galvanized stock, and are adapted for all classes of buildings, on any kind of material for roofing*

Fig. 70



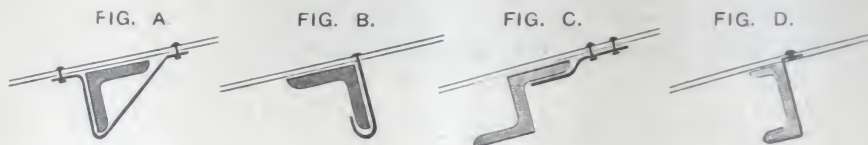
Shows sections of Commercial Combing Cap.



## FOR ROOFING, IRON FRAMING OR SIDING

The side laps should be riveted every twelve or eighteen inches, or closer, and end laps on every other corrugation.

One of the best methods for fastening the sheets to iron beams and purlins, is by passing a cleat of band iron  $\frac{3}{4}$  or  $\frac{7}{8}$  inch wide around the purlins or beams, and rivet both ends to the sheet, by contracting or pressing this cleat toward web of beams or purlins, a tight and secure fastening is made which allows for contraction or expansion of the sheet.



The above engravings show several methods for applying Corrugated Roofing to iron roof frame work. Fig. A shows strap iron cleat riveted at each end; Fig. B shows a long wire or clinch nail driven through the corrugated iron and bent around the angle iron; Fig. C shows a cleat made from bar iron, riveted firmly to the Corrugated Roofing and binding against the flange of Z bar or Angle Iron, and Fig. D a strap iron cleat riveted at one end only, the other end clamping the flange of channel iron.

When desired, we furnish cleats, rivets, etc., for fastening by either of the methods illustrated above.

## RULES FOR ESTIMATING QUANTITIES OF $2\frac{1}{2}$ INCH CORRUGATED SHEETS

**For Roofing.**—Select such of our regular lengths of sheets as will cover your rafters most economically (allowing 3 inches end laps and 2 to 4 inches projection at eaves). First add together the length of sheets selected, then multiply their total length by the length of roof, adding 8 per cent. for side laps. For general approximate estimates add  $12\frac{1}{2}$  per cent. to the superficial area of a given roof, the result being very close to the amount of Corrugated Sheets required for covering same.

**For Siding.**—Where the sides of a building are no higher than the length of one sheet, 7 per cent added to the superficial area will give the number of squares of Corrugated Sheets required to cover; when there are two or more rows of sheets in height, add 8 to 10 per cent., varying with amount lapped at ends of sheets.

## FOR SIDING—WOODEN FRAMING

Use either  $2\frac{1}{2}$  inch, or  $1\frac{1}{4}$  inch wide corrugations; the first is preferable.

In planning your structure, arrange height of sides for using regular length sheets, allowing for two inches lap at ends of sheets.

Commence at the bottom, running first row across side, lapping one corrugation at each side of sheet.

Be very careful to keep the Edge Corrugations plumb and in line.

Put the second row in the same manner, lapping ends of sheets down over the top of the first row; one or two inches is sufficient from this lap.

Where used without sheathing boards, the studding should be framed to measure twenty-four inches from center to center, or if preferred, put the studding three to four feet apart and nail the sheets to baton strips, placing these strips, say, two feet apart and across the studding horizontally.

Nail siding vertically through the tops of corrugations, and horizontally in the valleys of the corrugations.

When studding is used, 2 by 4 inch lumber will answer, usually.

Using heavy corrugated sheets, and dispensing with sheathing boards, lessens danger from fire, thereby reducing insurance.

When the liability of injury from outside contact is considerable, a heavier gauge of iron should be used than is otherwise necessary.

*Do not let the Iron Siding have contact with the ground.*

Our Corrugated Sheets can be used in various ways as a substitute for cornice work and in a very effective manner, by giving the subject consideration.

A strip of iron corrugated diagonally, or one used with corrugations horizontally disposed, often gives a pleasing effect.

We make **Metalic Weather-Board Siding**, and **Beaded Siding**, in sheets 8 feet long.



# CORNICES

Fig. 238



Height, 24 inches. Projection, 12 inches. Price per lineal foot, 80 cts. End Trusses, \$4.50 each. Urns, \$2.15<sup>1</sup>/<sub>2</sub> each.

Fig. 239



Height, 24 inches. Projection, 12 inches. Price per lineal foot, \$1.00. End Trusses, \$4.75 each. Urns, \$2.15 each.

Fig. 240

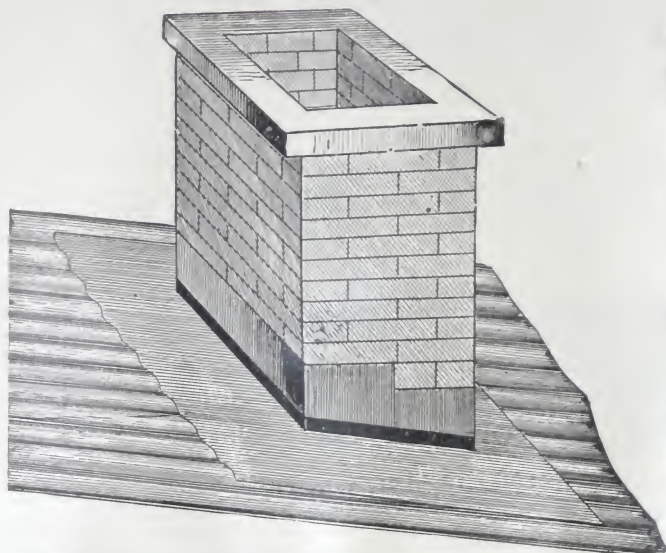


Height, 20 inches. Projection, 10 inches. Price per lineal foot, 80 cts. End Trusses, \$4.75 each. Urns, \$2.15 each.



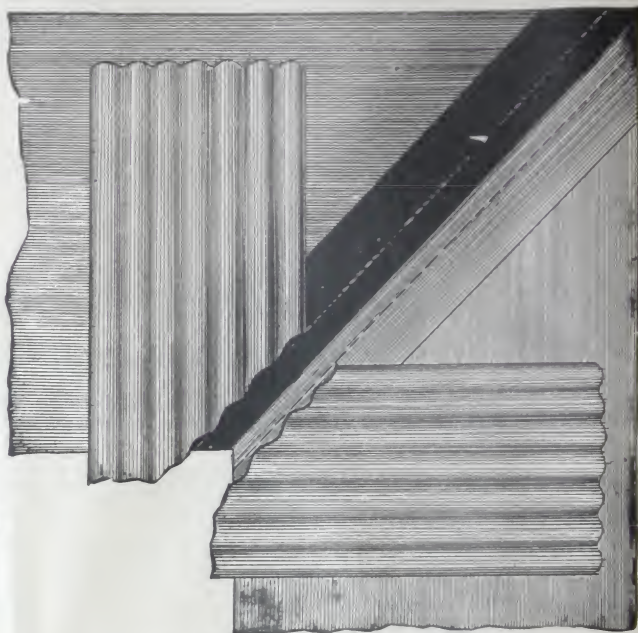
# CORRUGATED IRON FIXTURES

Fig. 74



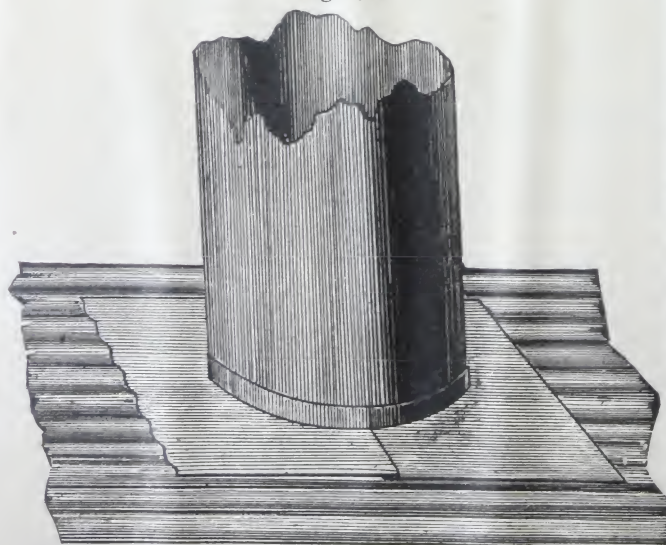
Shows flat fitted sheets applied to square chimney opening and corrugated iron. Laid as above—the upper side slips under corrugation—the lower side of flat iron runs over the corrugated sheets, the flashing of flat sheet to be counter flashed with our fiber and cement.

Fig. 75



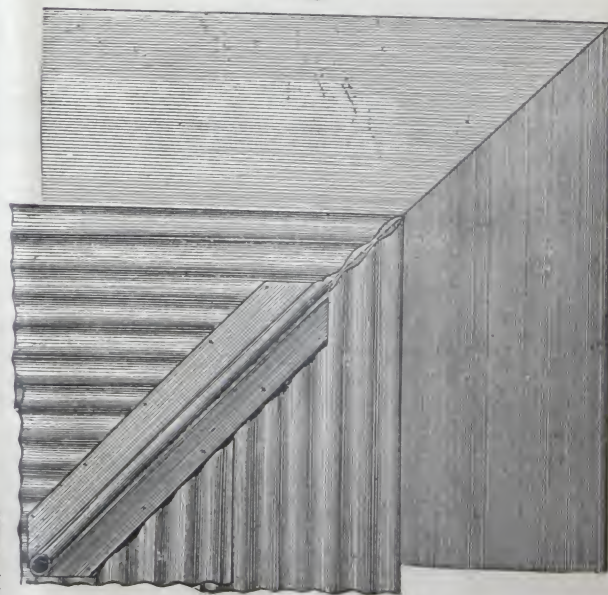
Shows how to cut and apply corrugated iron in valleys.

Fig. 76



Applied to circular stack. At upper end of flange, next to stack, we recommend the counter flashing with our cement, as per directions. In applying the plates, one piece runs under the corrugated iron and the other over the same as in Fig. 76.

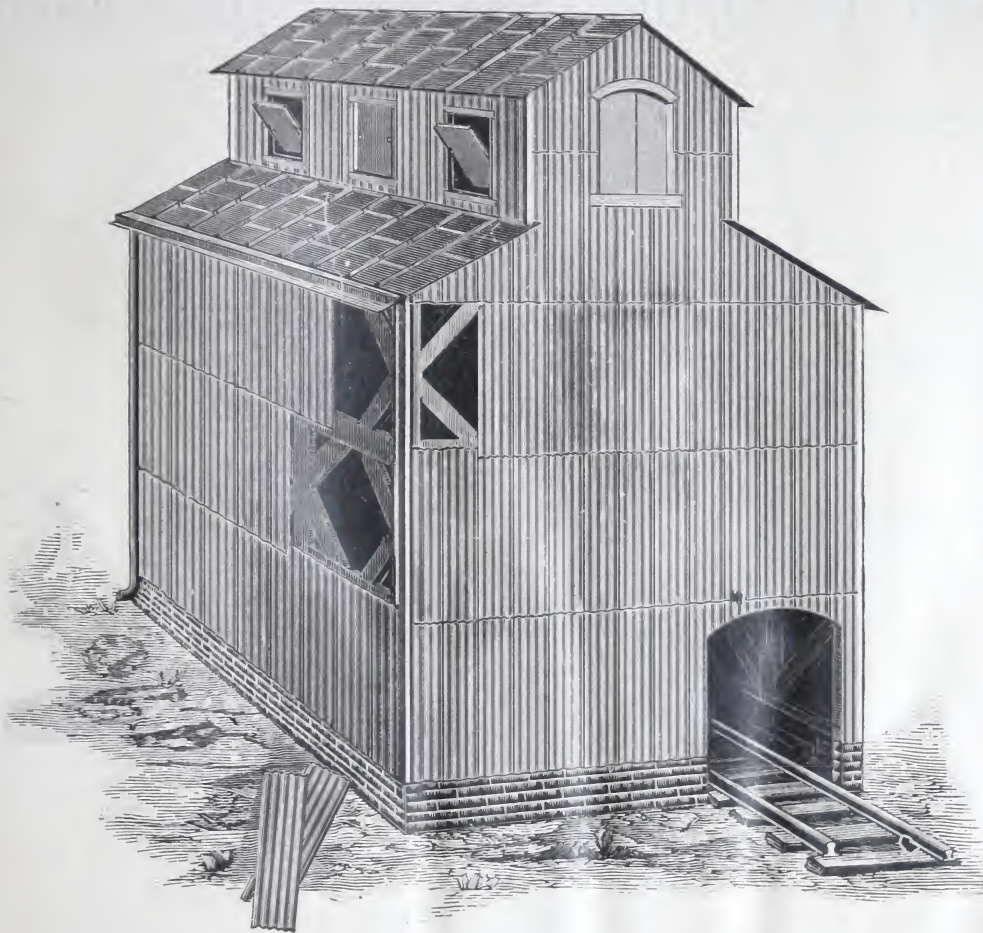
Fig. 77



Shows how to apply corrugated iron on hips, and covering same with capping.



Fig. 73



Shows application of Standing Seam Roofing and straight Corrugated Iron to an Elevator, Mill or Railroad Depot

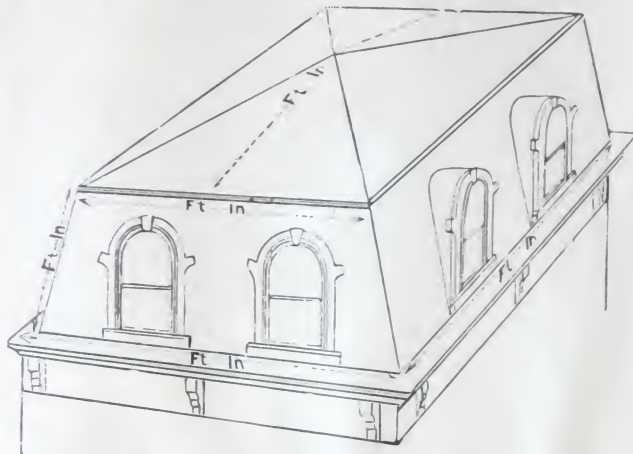
This makes a substantial, durable, fire proof covering of the finest architectural appearance, with which no flat covering can at all compare.

Any of the within named goods, made of *Black Iron, Painted Iron and Galvanized Iron*, furnished in large and small quantities by the square (10 x 10), after manufacturing Special quotations in car load lots.

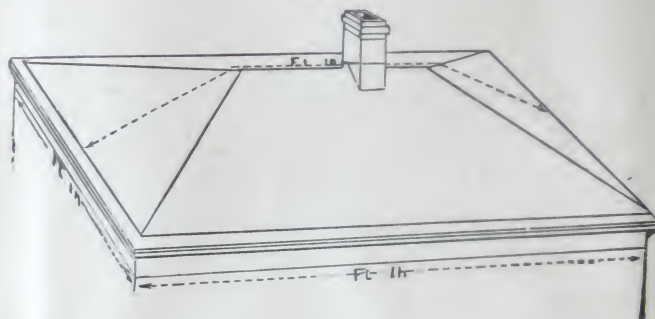


# How to Order Roofing and Siding

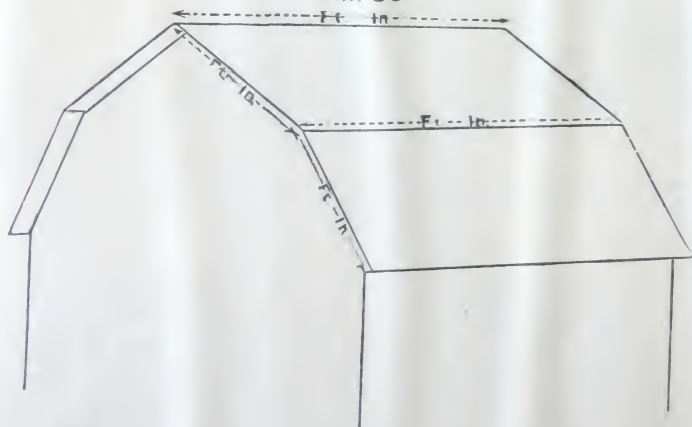
Mansard Roofing, furnish us dimensions as indicated per  
Fig. 78



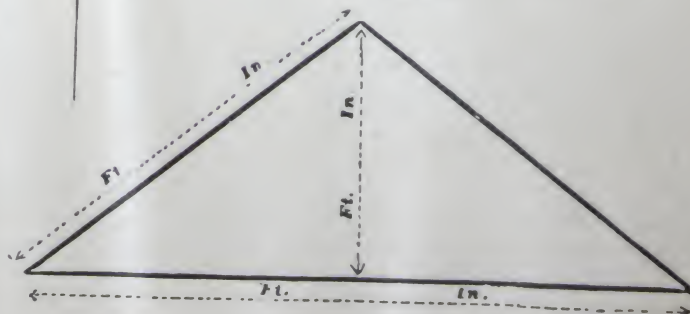
For Hip Roof Building and Siding, furnish us dimensions  
as indicated per  
Fig. 79



For Curb Roof Building and Siding, furnish us dimensions  
as indicated per  
Fig. 80

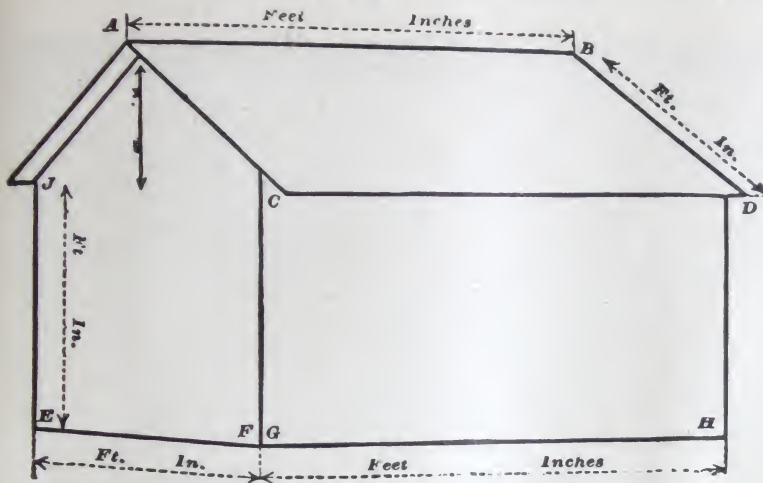


For Gables, furnish us dimensions as indicated per  
Fig. 81

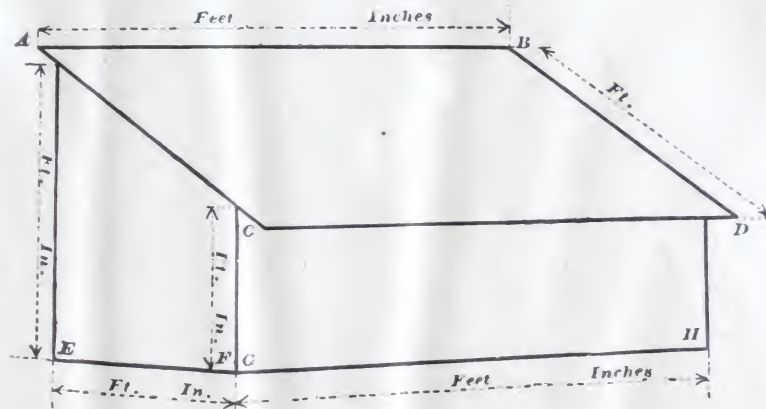




For Gable Roof Building and Siding, furnish us dimensions as indicated per  
Fig. 82

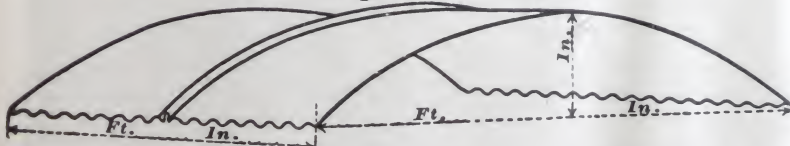


For Shed Roof Building and Siding, furnish us dimensions as indicated per  
Fig. 83



For Curved Sheets always state whether for Roofing or Ceiling, and furnish us  
dimensions as indicated per

Fig. 84



Allow for projections, if for Roofing.

If for Ceilings, make base lines from  $\frac{1}{4}$  to  $\frac{3}{8}$  less than distance between webs of I Beams, etc.; when shoes are used, state thickness of iron used in same, and give sketch of section of shoe, and, if so, width of same.

### SPECIAL

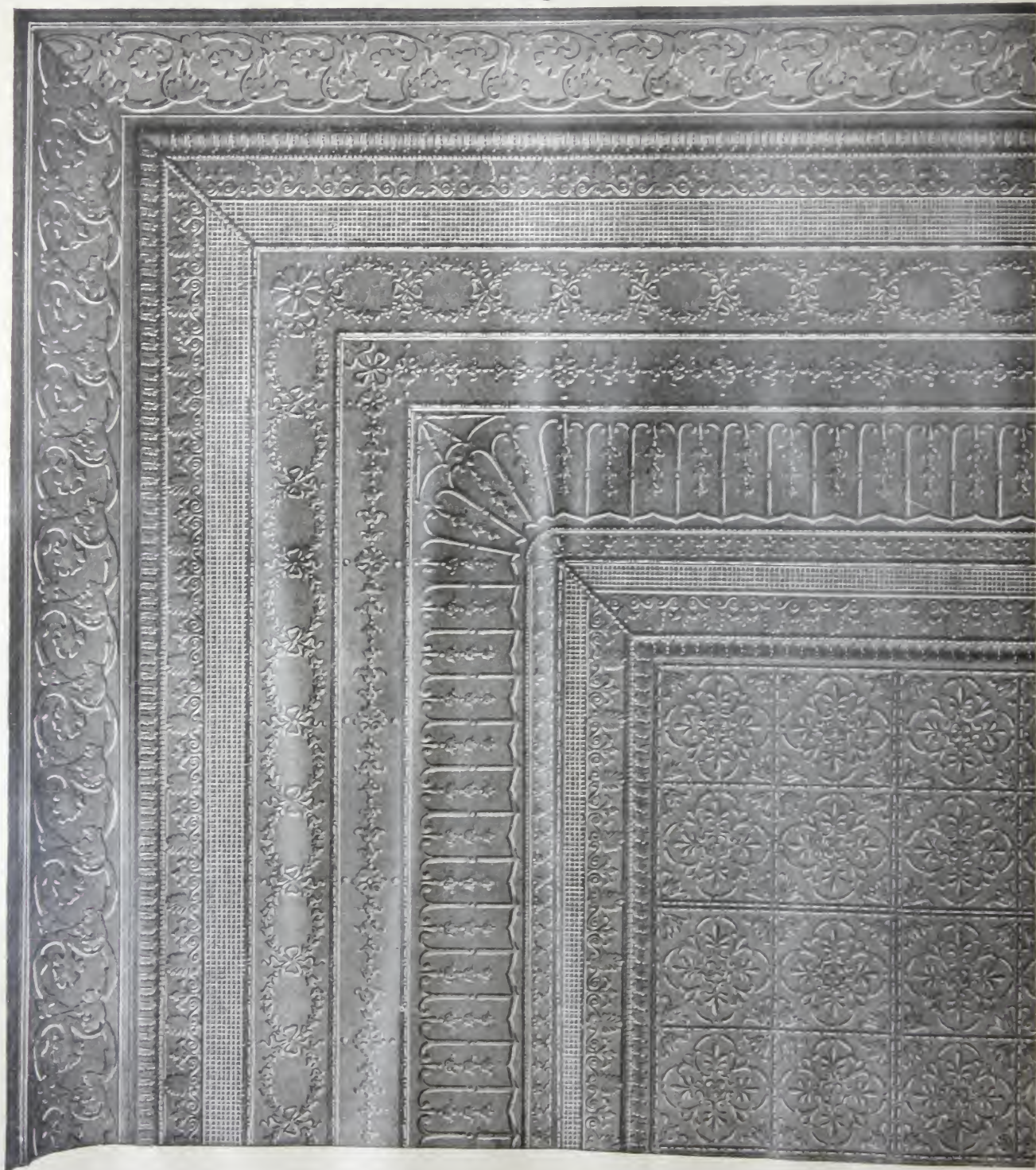
These rules must be followed, and no trouble will arise from short shipments or miscalculations. It takes so much Roofing Material to cover a certain space, and parties only deceive themselves by not allowing enough to complete the work.

After making measurements from out to out, either for Roofing, Siding or Ceiling, add 10 per cent for corners, cuts, laps, turning over and side and end fastenings over barge-boards, or up against parapet walls, ridge combs, etc. This will always insure enough material to cover space mentioned.



## EMPIRE AND COLONIAL CEILINGS—SUITABLE FOR RESIDENCES

Fig. 311



Shows our Continuous Plate Work, Cove, Enriched Styling, Border, Inner Border and Field Plates.



STEEL PRODUCTS

Side Wall Finish for all Classes of Buildings



Wainscoting Dado Body Frieze Cove

STEEL PRODUCTS

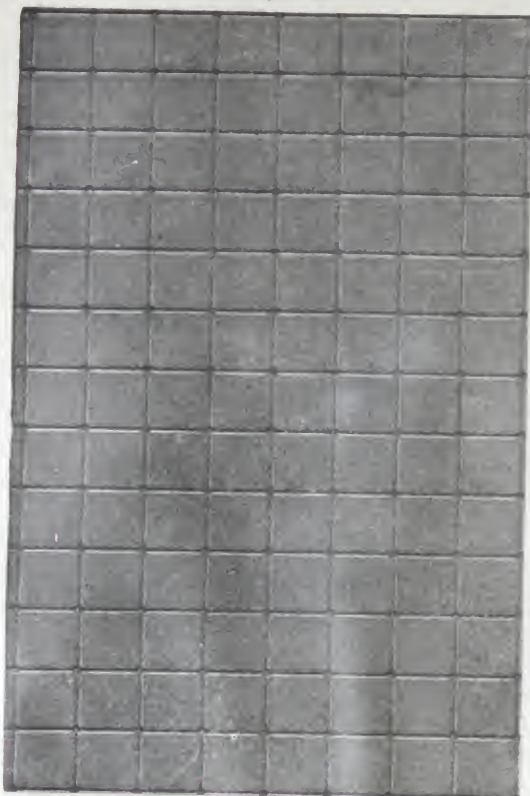
Side Wall Finish for all Classes of Buildings



Wainscoting Dado Body Frieze Cove



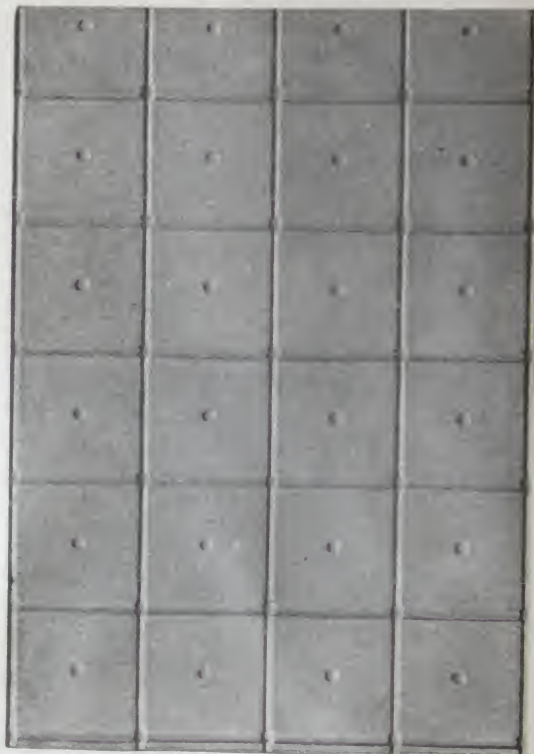
Fig. 94

Steel Tile,  $2\frac{1}{2}$  inch centers.

Shows sheet Steel Button Tile for wall finishing and ceiling blocks,  $2\frac{1}{2}$  inch squares. Stock Sheets, 26x102 inches, price 100 sq. ft., \$5.85.

Fig. 93

Steel Tile, 4 inch centers.



Shows Button Steel Tiling, 4 inch squares. Stock sheets, 28x98 inches, price per 100 sq. ft., \$5.85.

Fig. 184



3 inch Beaded Centers, 4 to 10 feet long.

Beaded Sheets for Siding and Ceiling

28 Gauge Painted Steel, per 100 square feet . . . . . \$4.00



# COPPER AND ZINC SHEETS, REEDED

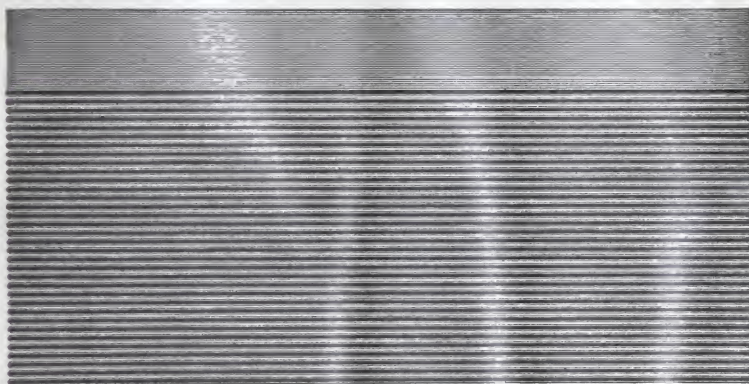
Write for further information of this work.

Fig. 301



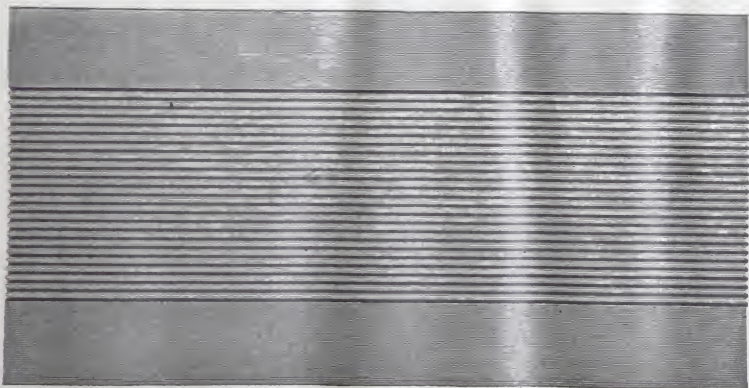
Shows  $\frac{3}{8}$  corrugation, lengthwise  
Sheet reeded its entire surface, per sheet . . . . . 50 cents

Fig. 701



Sheet reeded with one flat edge margin, per sheet . . . . . 70 cents

Fig. 702



Sheet reeded with both outside edges left flat, per sheet . . . . . 85 cents  
Customers furnishing the material; above prices are only for the labor of reeding sheets.

Made in three sizes of reeds, viz. {  $\frac{5-8$  8 feet or less. |  $\frac{3-8$  6 feet or less. |  $\frac{3-16$  3 feet or less. | Center of reeds, crosswise or lengthwise.



Fig. 244



Price, \$2.50 each

Fig. 249



Price, \$2.50 each

Fig. 245



Price, \$3.00 each

Fig. 250



Price, \$2.75 each

Fig. 246



Price, \$2.50 each

Fig. 251



Price, \$2.75 each

Fig. 247



Price, \$3.00 each

Fig. 252



Price, \$3.25 each

Fig. 248



Price, \$2.75 each

Fig. 253

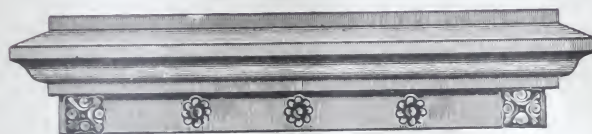


Price, \$3.50 each



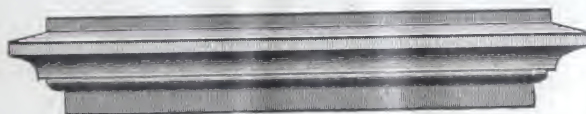
WINDOW CAPS AND EAVE COVERING. DOOR CAPS OF  
ANY SIZE MADE TO ORDER

Fig. 604



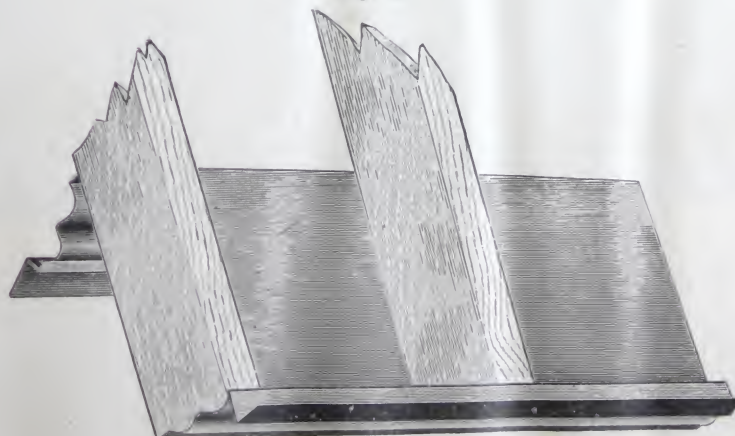
Price per Cap, \$2.10. 36 inches long, or less.

Fig. 605



Price per Cap, \$1.80. 36 inches long, or less.

Fig. 32



Eave Covering



# ROCK FACED STEEL BRICK

For Corner Finishings see page 84, Figs. 150 and 630

Fig. 1273



Size of Sheets, 26 inches x  $96\frac{1}{4}$  inches. Size of Brick,  $2\frac{1}{4}$  x  $8\frac{1}{8}$  inches.

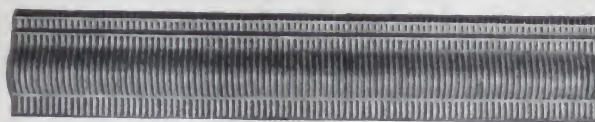
THE FINEST COVERING FOR DWELLINGS EVER INTRODUCED

Superior to the Original.

Finishing Coat to be Buff, to Imitate Rock Faced Buff Brick. Mortar Line Red



Fig. 198



Size, 3 inches wide, 1 inch deep, 4 to 10 feet long

Fig. 199



Width,  $3\frac{1}{8}$  inches; depth,  $\frac{7}{8}$  inch. Enriched Foot Mould (when wanted for picture mould, specify it in order)

Fig. 200



Enriched Mould—width,  $2\frac{3}{4}$  inches, depth,  $1\frac{1}{4}$  inches

Fig. 201



Shows Figured Mould—width,  $2\frac{1}{4}$  inches, depth,  $\frac{3}{8}$  inch

Fig. 202



Enriched Dental Mould— $2\frac{1}{4}$  inches wide,  $\frac{3}{8}$  inch deep

Fig. 203



Dental Embossed Mould— $1\frac{1}{2}$  inches wide,  $\frac{3}{8}$  inch deep

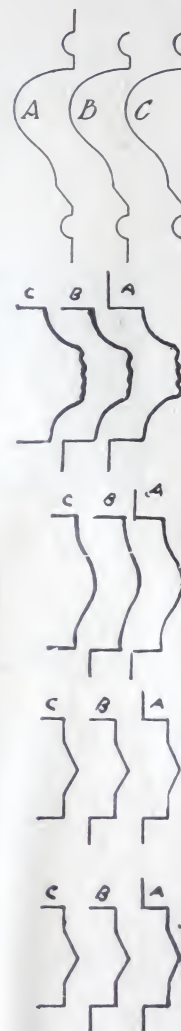


Fig. 229.—Shows completed Mitred Corners of our Enriched Coves of any style, convex or concave. This mechanical process can be perfected by any careful workman, by following our directions, and the results are far better than using a stamped corner ornament or leaf, as we illustrate in the above cut. The symmetry of the cove is retained around the sides of the room without marring the effect of the cove, which will occur if ornaments were used to cover up bad workmanship. All our Mouldings have flat Margins on each side, and we request all customers to be plain in ordering



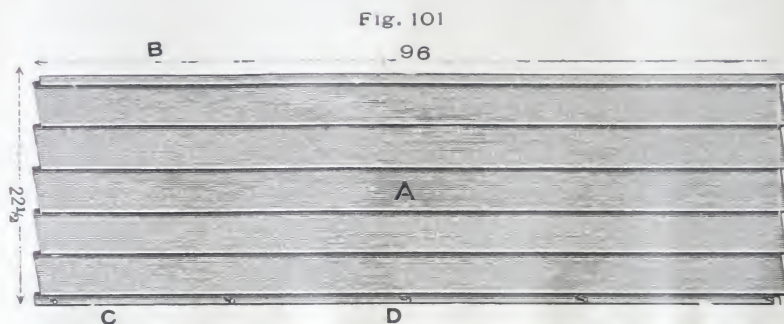
## DEPARTMENT FIFTH

## STEEL CLAPBOARDS FOR SIDING

## USING CONVEX AND CONCAVE CORNER BOARDS

Superior to Wood or Stucco, one-third the cost of Brick or Stone. Rated the same as either by the Insurance Underwriters. Neat in appearance, easily applied. Its lasting qualities compare with brick or stone.

Patented May 3, 1887.



Shows Sheet as shipped, regular length 8 feet, width 22 1/2 inches, 5 Panels in each sheet

Fig. 102



Shows sectional view of Clapboard with Lap joint and nail partly driven. This lap forms hook joint, and if the nails are driven secure with a nail etc. the joint will be thoroughly water tight

Fig. 103



Shows Convex Corner Board applied, also Clapboards laid on each side partly finished

Fig. 104



Shows section of Convex Corner Board. We make both Convex and Concave

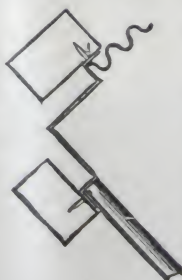
Fig. 54

Patent Allowed May 7, 1887



Shows inverted corner

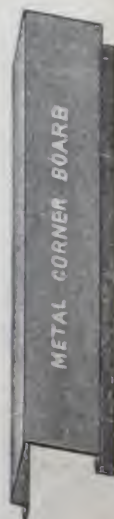
Fig. 53



Shows application of Corner Board to inverted corner.

Fig. 51

Patent Allowed May 7, 1887



Shows manner of finishing the corner of building with metal.

A—Sheet ready to apply on sides of building to studding or rough boarding, where nails are to be driven at every studding. B—Upper flange joint. C—Lower flange that fits over and under flange of upper sheet. D—Where nails are to be driven after two sheets are joined, follow up with nailing at each panel and studding; if laid on sheathing, nail under flange every 2 feet, this fastens each sheet securely to studding or sheathing. At openings or endings, cut off any surplus, using care not to bend or tear the panel at offset or at base, and apply this piece in commencing the next course.

These are so formed that they admit of finishing the angles and corners in a neat and fire proof manner and are recommended to be used by all architects and builders. Without them, corners are not completely covered and no good workman can make a perfect finish except by their use.



## APPLICATION OF CLAPBOARDS

Fig. 105



Shows a frame house covered with iron, viz: Pressed Standing Seam Steel Roofing and Metal Clapboarding on sides. This makes a thoroughly fire, lightning and weather proof house. Neat, economical, durable; saves insurance, retains paint longer, costs less and requires less material to repaint; lighter, simpler in application; can be applied on studding 24 inches apart, or over rough sheathing, no waste in applying. Made in lengths 96 inches and five panels to the sheet,  $4\frac{1}{4}$  inches wide, as shown in Figure 101.



Fig. 273

Bas Relief Plate.

**SPRING**

Decorated, without frames, \$15.50 net.

Size 24 x 48 inches. Price net, no discount.

Zinc Plates . . . . . \$ 6.50

Copper Plates. . . . . 10.75

Aluminum Plates . . . . . 11.50

Fig. 383

Bas Relief Plate.

**OPHELIA**

Decorated, without frames, \$15.50 net.

Size 24 x 48 inches.

Zinc Plates . . . . . \$ 6.50

Copper Plates. . . . . 10.75

Aluminum Plates . . . . . 11.50

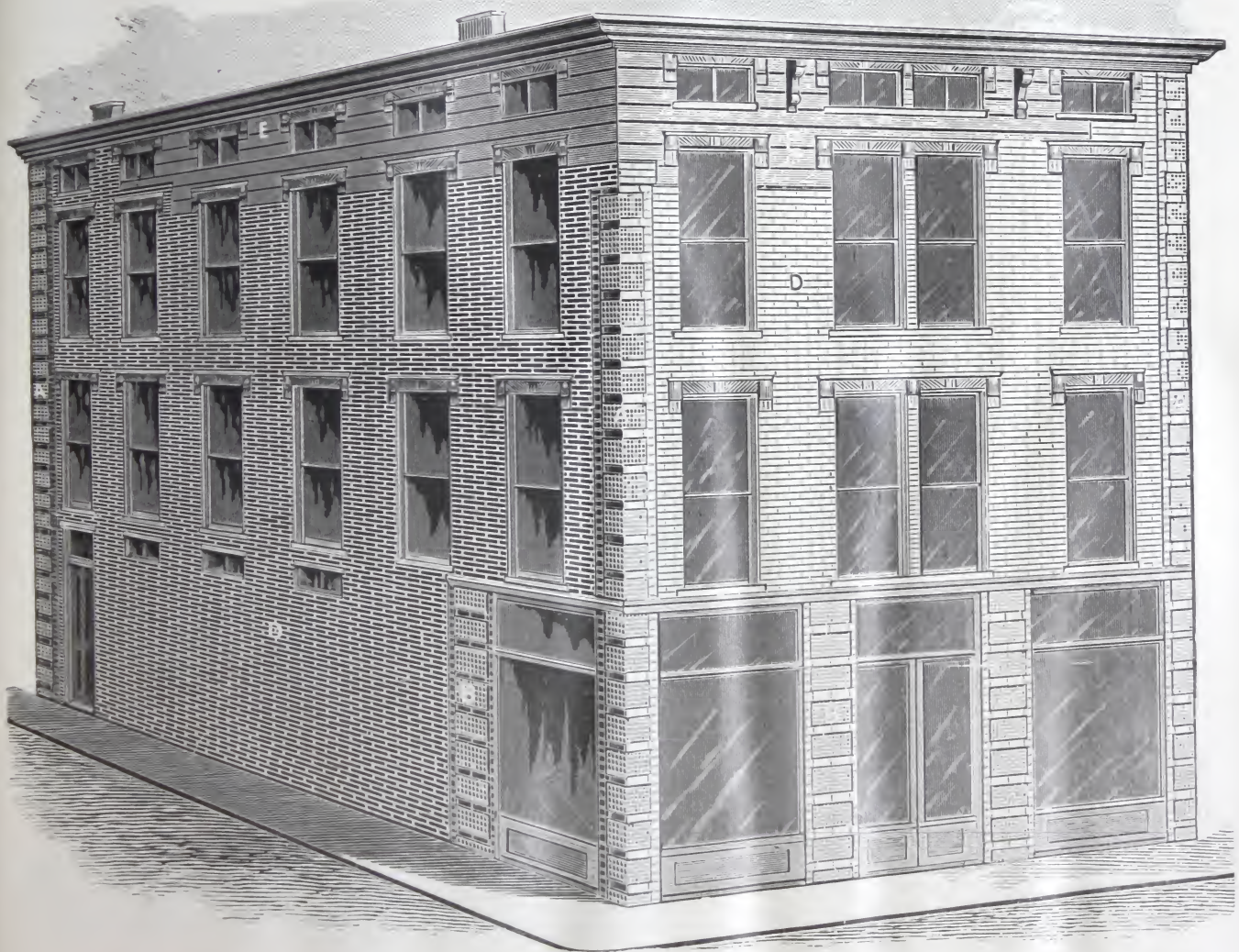


DEPARTMENT SIXTH

# PRESSED STEEL BRICK

The Crowning Sheet Steel Product

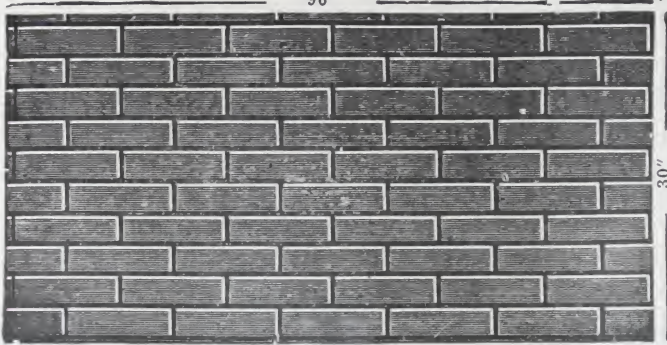
Fig. 143



Shows frame structure covered with our Steel Bricks and trimmed with our Steel Stone Panel. Neat, durable and cheap, as compared with stone or brick. It is fire-proof and substantial.

A—Sheet Steel Stone Panel corners. B—Sheet Stone Panel posts. D—Steel Brick. E—Sheathing.



Fig. 144  
96"

Shows Steel Pressed Brick as shipped ready for application

This is an entirely new device in Sheet Steel Building Material, lately placed on the market by us. We feel confident that builders, architects, contractors and property owners will see the advantage of this pattern in sheet iron or steel for outside covering on buildings of all kinds in preference to the old style "flat" and "corrugated" iron. This new form has the perfect appearance of the finest brick made.

It can be applied by any mechanic. No waste, lies perfectly smooth, and after painting cannot be distinguished from Philadelphia pressed brick. The Insurance Underwriters give this style of covering the same rate as brick or stone, and the relative difference in cost is: (Common brick) for brick and mortar, 12 inches thick, 10 feet square, surface laid, \$31.00; Sheet Steel Pressed Brick applied, painted and penciled, 100 square feet, \$7-25, or nearly four fifths less; against stone, it is about nine-tenths less.

### Directions for Applying Same

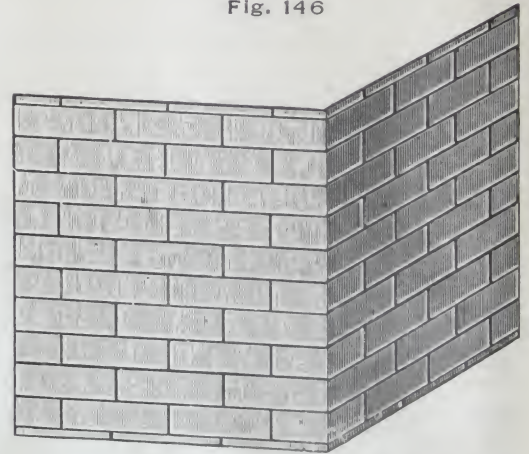
Commence at right hand corner about 8 inches from corner, always applying first sheet at bottom of right hand corner and lay from right to left on all four sides if they are to be covered. In starting first course if the framework rests on the ground, put a wood strip all around the foot, 3 inches wide; this will allow the first course to rest on wood and not touch the ground, in which case it would gather moisture and in time rust out from under side. After first course is laid, if a piece is left, use this to start the next course, always have the nailing flanges at top of sheet and end of sheet laid last, so that the next sheet will lap over flange at top and side and fit into grooves, and form perfect joints.

"ONE OF THE FINEST"

## SHEET STEEL PRESSED BRICK

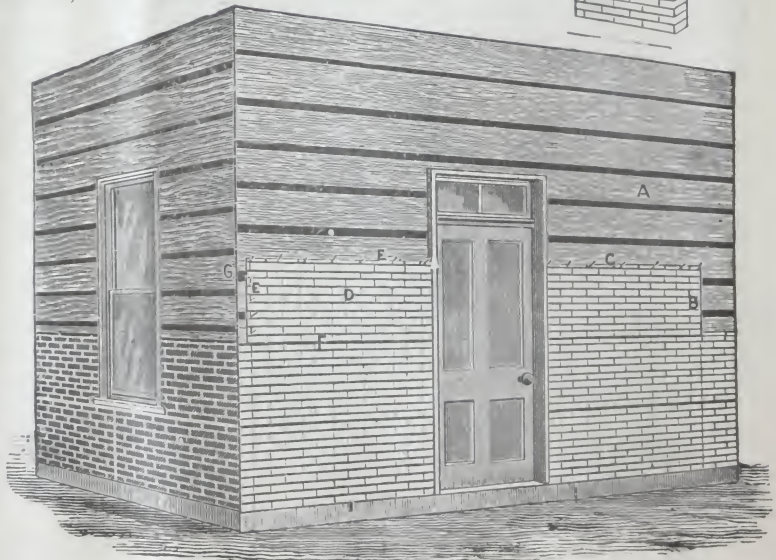
Patented April 5, 1877. Patented April 9, 1889. Machine.

Fig. 146



Shows a sheet bent at right angles for fitting corners where the Stone Panel is not used

Fig. 145



Shows building nearly completed with Sheet Steel Pressed Brick Covering.

C and D shows continuous laying and corners turned with sheet. E—First course resting on baseboard. (When there is a stone or brick foundation, the baseboard is not necessary.) F—First sheet laid of third course. G—Last sheet in corner to be turned, after completing all four sides in laying third course. A—Common  $\frac{3}{4}$  inch board sheathing. H—Sheet prepared for corner G.



## DIRECTIONS FOR ORDERING STEEL ROOFING, SIDING AND CEILING

---

For Straight or Plain Ceilings give exact size. Also say in which direction you wish length of sheet to run. If iron is to be applied to joists give distance between centers.

When ordering Corrugated or Crimped for Ridge Roof, state if we shall ship Combing Cap for Ridge.

When ordering Corrugated or Clapboard for Siding, state if we shall ship Corner Board to finish up corners of building.

When ordering Corrugated or Crimped, say whether the iron is to be used on boarding or direct to Rafters or Studding, and be careful to state what kind of Roofing or Siding you want; the number of Iron, whether painted or galvanized; the size of Corrugate—if Corrugated is ordered. A little attention to this may save delays in shipment, and enable us to fill your orders more promptly.

A practical experience of some 19 years shows us that the proper time to cut Iron to fit around openings, etc., is when the Iron is being applied. We therefore make no attempt to cut to fit, knowing the impossibility of giving satisfaction to our customers.

When ordering Roofing, Siding or Ceiling, fill out diagram on page 36 or 37 and enclose with order.



# POINTS RELATING TO SHEET IRON

AS A

## ROOFING AND SIDING MATERIAL

When used for siding, little, if any fault has been found by the consumer, as a covering for the sides of a building, except in the mechanical work of fitting around windows, doors and corners (whether convex or concave), the rough and ungainly appearance does not affect the protecting qualities, but it does not give the finish that is desired; this is easily overcome, as our improved devices allow the workmen to give the same appearance to this style of work as is done with other materials. We have brought new tools to facilitate work, and new styles of metal attachments that admit of fitting all openings and corners just as neat and perfect as is done by the carpenter or mason. What we wish to call to the attention of our agents, consumers, patrons, and all new inquiring customers, is the special point of using Sheet Steel for Roofing. This industry is new, comparatively speaking, although Sheet Iron has been used for roofing in this country for upwards of fifty years, and in the early part dating back to 1840. All of this kind of material was imported from Europe and applied under European devices, the principal one being the wood center, formed square, oval or what is now so widely known, V Crimped (the English styles are square and oval). In some the sheets are formed at sides with a square Cap, and other styles with an independent Cap; in both cases the result of one was just the same as the other, allowance for expansion and contraction was insufficient in both. The nails, from their exposure to the elements, would in time loosen, draw out, and cut the nail hole in the sheets or Caps, much larger than when first driven; this would cause a leak, loosen the sheets and provide a way to admit both rain and wind, results, leaky roofs, and sometimes by the loosening blow off. In later years these devices were improved upon, bringing out the V Crimped. The advantage gained over the old way was very slight, as it has been open to the same defects, and to-day wherever used it gives more or less trouble. During the past twenty-three years many devices have been brought out and many of them found purchasers, and are to-day in the hands of capitalists who are manufacturing and furnishing the trade and consumers. During the past ten years heads of corporations, proprietors and inventors have seen the necessity of guarding against certain defects, that existed in all the above mentioned Iron Roofing, that had the following devices for laying: 1st. Nailing through the sheet, whether in flat surface or on standing rib, riveting indentations, etc., all of these by time and exposure have conclusively shown that they are imperfect as roofing devices, leaking, loosening, expansion and contraction tears them from their fastening, and various other troubles arising. Therefore the inventive genius of man has been heavily taxed to bring out a roof which can in a measure, if not wholly, obviate these defects, and the results are that one point has been definitely settled, that no Iron Roof can be safely laid unless supplied with a *Standing Seam*, and it will be shown upon inquiring, that every manufacturer of Iron Roofing in the United States makes what is known as a *Standing Seam*. This device alone can not be patented, but device for combining two roofing sheets together, using a metal cleat, is patentable, and there are probably forty patents, having as many different devices for binding the sheets and fastening them to the Sheathing or rafters, all of them are superior to the old style *V Crimped or Corrugated Iron*, both of which fasten together and to the rafters by nailing through their sides and end laps. Many consumers in different parts of the United States have become disgusted with iron as a roofing commodity, and ignore this material. We beg to differ with them in this matter, as our experience dates back to 1869 as producers of roofing material and the repairing of all kinds of defective roofs.



# A WORD TO THE WISE IS SUFFICIENT

## MEANING OF AGENCIES

**A**N AGENT for our products means simply an exclusive customer for the territory assigned him or them, viz.: All inquiries from said territory thereafter are referred to agency, and we protect them in the sale of our goods. Our responsibility ceases upon filling any orders sent us by agents, except to make good any short shipments or imperfect sheets that have unintentionally been overlooked. He or they purchase our products at such times and in such quantities as may be required by their trade, naming selling price to their customer; and he or they (agents) are responsible alone for the mechanical work performed, and we are only responsible for the quality, perfect sheets, and full accompaniment of trimmings.

We consign no goods nor appoint any one to sell on commission, but sell our products outright, either to the consumer, merchant, or agent, to use or sell again.

## NOTE

**P**ARTIES not desiring to buy tools may sell our goods so long as they return our tools according to our rules, but until they buy tools we do not protect them by referring inquiries to them. When we have no agent we sell direct to the consumer at wholesale prices.

## IMPORTANT NOTICE

**P**ARTIES who make inquiry, and after receiving prices of our goods, desire to order, must observe the following: We cannot deviate or make any concessions. Our goods are made from first quality material.

Please observe these rules and there will be no delay in shipping; otherwise we cannot enter the order. We try to have no bad debts for our paying customers to make good. All are served alike, quick cash sales, small profits, and A 1 goods.

We are often favored with orders from those who have recently commenced in mercantile business, and not reported by the Commercial Agencies. While such buyers may be thoroughly responsible, yet our rule is, in filling orders from patrons not favorably rated by the Commercial Agencies, or not sending satisfactory references with order, to make shipments to our order, and to send Sight Draft with Bill of Lading attached thereto, through Bank or Express for collection.

The invoice for the goods, in such cases, is mailed direct to the customer, so he may be duly advised of the amount of Draft and the itemized charges. The Bill of Lading is, of course, full evidence of shipment of goods in good order, and we guarantee them to be first class, and as represented in Invoice and Bill of Lading.

To insure the customer of this fact, we authorize the Collectors to hold our draft until arrival of goods, *when our patrons request them to do so*. Please inform us as to what Bank you prefer Draft sent for collection. We will ship to parties furnishing satisfactory references.

## TERMS

**G**OODS sold on cash quotations must be cash on delivery.

Thirty days from date of invoice given parties having good commercial rating, or known to be responsible and prompt.

Parties not well rated or not known to be responsible, and wanting credit, must furnish good references, from whom satisfactory reports as to financial responsibility must be received by us before bill of lading of shipment will be released and credit allowed. Otherwise they must pay our sight draft with bill of lading attached, at bank or express office, on arrival of goods ordered, which will enable them to obtain the goods at depot.

Small orders from transient customers must be accompanied with the cash.

Remittances must be made by draft, express, P. O. money order or postal note, and not by personal check, unless the same be certified to as good by the bank on which it is drawn. Exchange, express charges and telegrams must be prepaid.

All accounts subject to sight draft without notice after ten days from maturity.

No extension allowed, nor more than thirty days' credit given, except to parties financially responsible, on note bearing 6 per cent interest after 30 days.

Special tools loaned for applying our roofing; tools to be returned to us freight prepaid on completion of roof.

Tools must be returned as soon as the roofing is laid, with our return card attached, and bill of lading sent us as proof of shipment, to enable us to trace if lost in transit, and know whose account to credit with tools returned.

Tools detained without special permission will be considered sold and subject to sight draft.

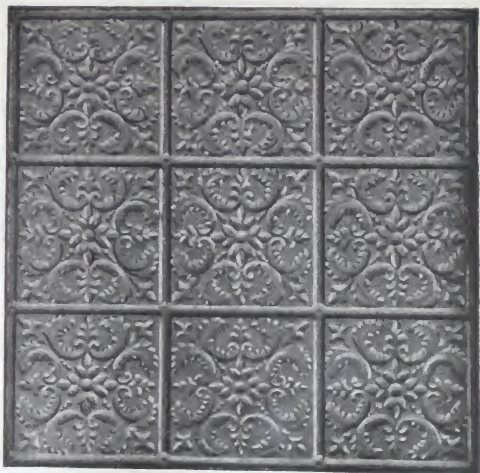
Awaiting your orders,

Respectfully yours,

NEW YORK IRON ROOFING AND CORRUGATING CO.



Fig. 549



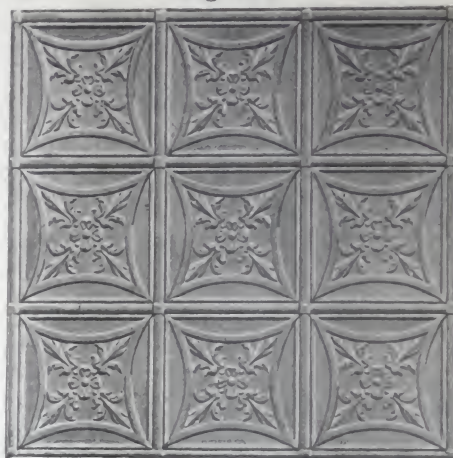
Italian Renaissance No. 2. Size of Sheets  
 $29\frac{1}{4} \times 11\frac{1}{4}$ . Size of Tile,  $5\frac{3}{4}$  inch.

Fig. 551



Size,  $24 \times 96$  inches.

Fig. 550



Colonial Fret. Field Plate.  $27 \times 27$  inches.  
 Continuous in lengths, 81 inches.

Fig. 552



Size,  $24 \times 96$  inches.



## DEPARTMENT SEVENTH

FOR COATING METALLIC SURFACES EXPOSED TO WEATHER

MOST DURABLE  
 MOST WATER-PROOF  
 MOST ECONOMICAL  
 MOST PRACTICAL  
 MOST FIRE-PROOF  
 MOST USEFUL PAINT IN THE  
 WORLD FOR

## METAL ROOFS



## SPECIAL NOTICE

Tin and Sheet Iron Roofs Condemned by Tinnerns, as unworthy of repairs, are especially solicited. We effectually stop all leaks, and extend their usefulness for years, by the application of OBELISK IRON CEMENT AND PAINT.

## PRICES

Per Gallon (less than  
 barrel lots) ..... \$1.35  
 Per Gallon (barrel...  
 lots) ..... 1.25

FOR PROTECTION OF TIN AND IRON ROOFS

OBELISK METALLIC PAINT  
 WORLD-RENOWNED METAL ROOF PRESERVER



# OBELISK METALLIC PAINT

PATENT ALLOWED MAY 11, 1887

In the hands of an honest workman, produces a covering that will resist atmospheric changes, prevent rust, and stop leaks in tin or iron roofing.

*This covering adheres firmly to the surface to which it is applied, thoroughly cementing all joints, seams and breaks, strengthening the entire surface, forming a pure, non-corrosive coating, susceptible of great elasticity, without cracking or peeling. This feature is one of great importance to metal roofs, as the covering does not deteriorate with the change of seasons, but stands intact through wet or dry, heat or cold. Simply painting roofs with ordinary compounds does little, if any, good, as the oil soon dries out and leaves the mineral body in a scaly or chalky condition, while the Obelisk Metallic Paint furnishes a coating equal to the metal to which it is applied, being composed of foreign gums, native Sesquioxide of Iron, Manganese and S. T. P. Body Oil, as manipulated by us, and, if applied in accordance with our mode of treatment, will produce an indestructible covering for metal against natural causes. This paint supplies a long felt want, and any tin or iron surface properly coated with it is certainly doubled in value for roofing purposes, for the metal cannot rust. It will prevent or repair broken joints and seams, and remain in good condition for many years. During the past twenty years this paint has been applied to over 1,000,000 squares of iron, tin and fibrous surfaces, distributed throughout the United States, represented on the finest and largest public and private buildings, Iron Plants and Manufacturing Plants, and in no instance has it come to our knowledge of its giving dissatisfaction or proving contrary to our representations, fully meeting the claims made by us, and proving one of the best preservers of metal and metallic roofs ever offered to the public.*

## CAUTION

We manufacture the original Obelisk Metallic Paint from purest, toughest and hardest Lake Superior Iron Ore. The Obelisk Metallic Paint is not made of slate, shale, rotten stone or clay, like other so-called mineral paints, with which we do not intend to compete. Our paints are more durable and as valuable as the best red lead, and costs much less.

## ANALYSIS OF IRON ORE

Sesquioxide of Iron . . . .	93 68 per cent.	Alumina . . . . .	3.06 per cent.
Silica . . . . .	3 20 per cent.	Loss . . . . .	.06 per cent.

Equal to 65.00 per cent. of Metallic Iron.

BUT ONLY THAT BEARING OUR TRADE MARK OF THE OBELISK.

## BEWARE OF FRAUDS AND UNPRINCIPLED DEALERS

Some gentlemen have been in the habit of using our name or a name so nearly ours as to deceive the public, and selling burnt ore, clay and stone paints, representing them to be the genuine Obelisk Paint, the same as manufactured by us. You may have bought burnt ore paint, thinking you were getting Obelisk Paint, and, if so, of course you did not get satisfaction. It has cost you double what it would had you bought the genuine, because you had to use more of it, and if you have painted iron or tin, it has rusted, because the burning of the ore has changed its nature and made it subject to re-oxydization.

Our paint will not re-oxydize, because the ore is the perfection of oxydization, and nothing is done to change its nature.



## A WORD TO PROPERTY OWNERS

---

Close attention paid to the repairing and painting of metal roofs has clearly shown that lead solder will not unite sheets of metal together against moisture or the elements when used for roofing purposes. Tin plate varies in quality the same as any other commodity, and is composed of many different grades of iron coated with tin or lead. Many have the idea that tin roofing is composed of solid tin, while others have the impression that the tin is incorporated through the entire body of the sheet. In order to have this communication thoroughly understood, we think it necessary to make a brief explanation of the mode employed in the manufacture of tin plates. All tin or leaded plates are composed of sheet iron—first quality charcoal iron, second quality charcoal iron (imperfect sheets), third quality coke iron.

These various iron sheets are treated to a coating of tin or lead solution. When finished, they are known as tin or leaded plates. To facilitate the working of these different brands of roofing, it is necessary to join the sheets together by means of hooking, and then soldering. When they are laid upon boards or sheathing to form a roof they are then subject to great strain upon each other, caused by the atmospheric changes, expansion and contraction. Then it is that the joints and seams are tried, and the strength of this roof is measured, just the same as the strength of an iron chain would be, provided it had a weak link. This imperfect link would represent the strength of the chain; so *does the lead solder measure the strength* of a tin or lead plate roof. Several sheets hooked together and soldered with lead and subjected to atmospheric changes will expand and contract. Each sheet being of the same material will act alike, and the lead being a shorter and softer grain, must give way to its stronger and superior neighbor. Results are, a broken joint or seam; next follows an opening, and next develops a leaky roof. You call in the tinner and he only temporarily stops the leak with the old remedy, lead solder, and one warm day's sun with the cooling night air subjects the roof to great and sudden strain, and the old breaks reappear. Another call makes the discovery that the tin is so rusty and bad that, to make a secure job, you must have a new roof, of the same construction, soldered joint, and subject to the same strain, producing the same results—*leaky roofs*.

Hundreds of remedies have been tried during the past twenty-five years, and for the past twenty years none of them have proven of any account, except ours, known as the original Obelisk Roofing Paint. Out of the thousands of metal roofs treated by us during these years we have never had brought to our notice a single failure. Never has a joint, or seam or hole in a metal roof leaked after we had treated it. Work done by us in this city during the last ten years presents the same appearance that it did when first finished. This coating forms a covering that resists atmospheric changes, not affected by the burning of soft coal, strengthens every joint and seam, prevents rust, will remain in a perfect condition for many years without renewal, at the same time placing the roof in a condition that will not require watching or cause damage by leaking. *No matter how badly the roof leaks* this paint will restore it, and accomplish the desired effect if the directions are followed. A trial costs little, and will prove a great benefit to the property, economy to the owner and the truthfulness of our claims.

*Competition in tin roofing is so great, and prices have become so cut, that it is impossible to furnish a good quality of plate and do a first class job.* No business man can afford to work below cost, and he is forced to use a low grade to meet his competitor, and in seven cases out of ten the roof taken off will prove far superior in quality to the new one. If the owner had known of this paint and cement, and employed an honest workman, he could have saved many dollars, and had a much better roof than the new one will prove. This paint applied to new work will keep the metallic surface free from rust, covering the joints and seams in such a manner that expansion and contraction cannot break them, and will be free from any expense to the owner for five or more years. *The ordinary mode of painting roofs* has proven of little worth, if any, and the best will not last any length of time. Some property owners paint every year, some in two years, while others neglect for many years, and allow rust to form to such an extent that the metal is beyond repair.



*We have done more to raise the value of Tin and Iron for Roofing purposes than any other coating or compound heretofore known. Tin or Iron roofs will not rust out when properly coated with our Paint.*

When you are offered a good, first class article for a low price, much below cost of making such goods, you can rest assured that either the seller or buyer will be cheated, and nine times out of ten it will prove that the buyer has suffered.

## OBELISK METALLIC PAINT

## ITS WORTH TO ALL

Twenty years' study and experiment have developed the finest Fire and Weather Proof Paint ever put on the market; an altogether original process and amalgamation of pigments, whereby a paint is produced which combines advantages not afforded by any paints now known in the market. It is called Obelisk Metallic Paint. Some of the advantages mentioned are as follows: It is not only suitable for all purposes for which common or superior lead paints can be used, but for many others for which they cannot be used with effect, viz: As a protection against the possible penetration of dampness, the effect of salt or salt water, diluted acids and alkalies, withstanding from 400 to 500 degrees of heat, usage over tar and its compounds, its resistance of ammoniacal vapors and sulphuretted hydrogen gases, *proof against worms, ants, barnacles*, preventing oxydization of metals, even arresting the same after it has attacked metals. It contains no poisonous substances, and can be used without injury by any person, even of the most delicate condition. For coating tanks holding water, etc., it imparts no taste whatever. Infectious germs can find no lodgment on it; it can be used on surfaces of wood, iron, stone, plaster, brick, zinc, tar, etc.; its surface can be washed without injury. One coat prevents penetration of moisture, and two coats produce a body that withstands all elements; it can be applied over other paint, or other paint over it. For iron work, such as columns, girders, railings, bridges and iron ships, it has no equal. Its covering capacity on clean metal surface is 175 square feet, two coats, to the gallon, while its cost is not much in excess of common paints. It is easily applied by any person. Its effect upon any substance to which it is applied is the same as a coating of porcelain to an iron vessel; in fact it hermetically seals the surface to the admission of air, water or any substance whatever. The only paint fires used about blast furnaces, rolling mills, gas houses, sheet iron mills, etc. It has been used extensively among these industries during the past fifteen years, and in no instance has it failed to give satisfaction, fulfilling all claims made for it.

In ordering paint it is best to also order the cement, which must be used according to directions in stopping leaks of any kind. Ten pounds will repair about one hundred leaks in joints, seams or rust holes; also use the cement for flashing; it is a permanent remedy for stopping leaks around chimneys and skylights.

The Original Obelisk Paint and Cement, with full and plainly printed directions how to apply, put up in one to fifty gallon packages. Cement in five pound to three hundred pound kegs.

For Sale only by

New York Iron Roofing and Corrugating Co.

Samples and full printed directions to apply, upon application. Trade supplied.



## DEPARTMENT EIGHTH

## 22 YEARS' TEST

Every kind of leaks in a roof can be effectually stopped by OBELISK IRON CEMENT. It can be applied readily and perfectly without the use of heat or special tools, which cannot be done with solder or any other kind of compound. IRON ROOFS made perfect by its use. No joint, seam or leak upon which OBELISK IRON CEMENT is applied ever gives out. It is perfection. Tinnors or roofers can not afford to do without it. Once used always used.

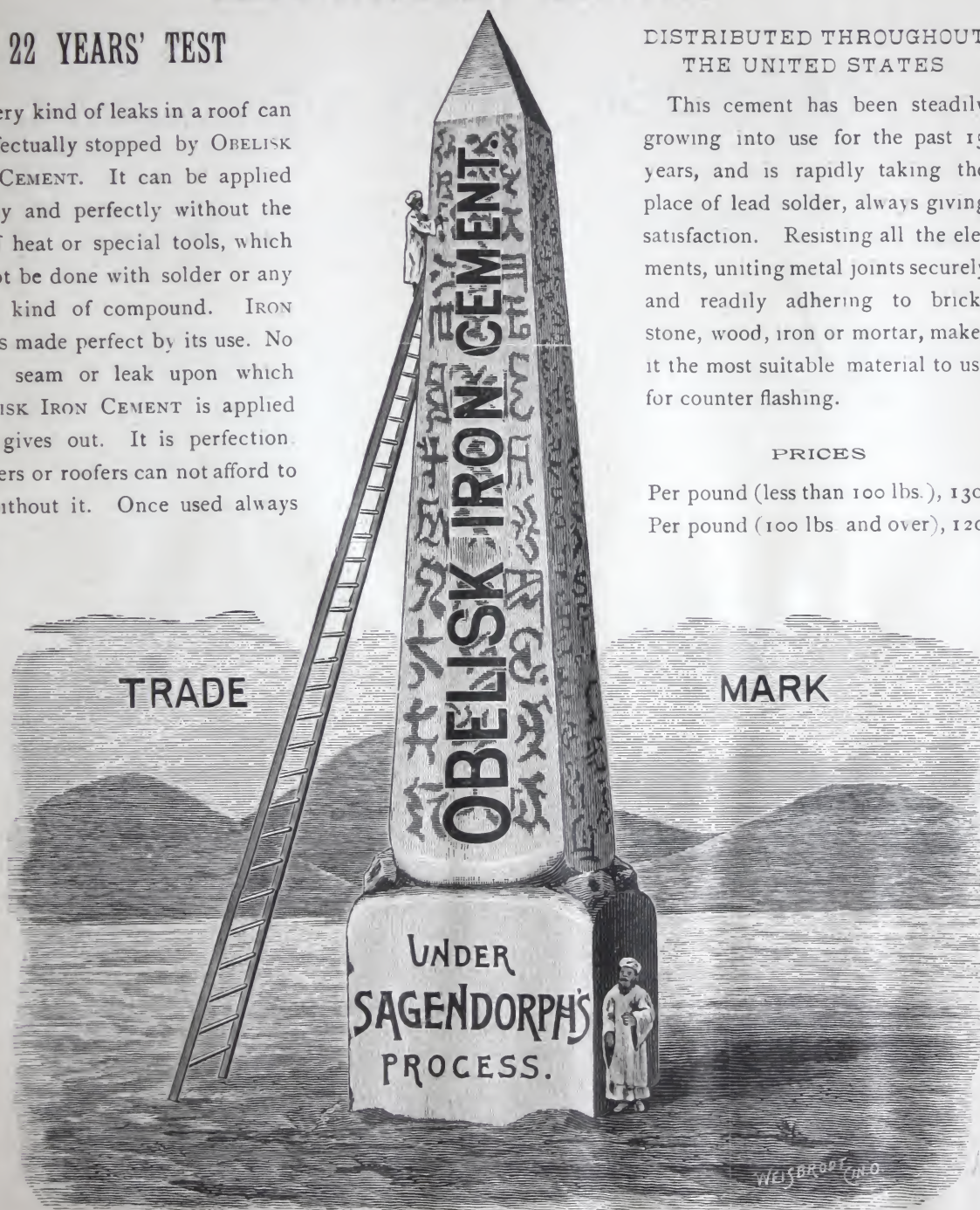
DISTRIBUTED THROUGHOUT  
THE UNITED STATES

This cement has been steadily growing into use for the past 15 years, and is rapidly taking the place of lead solder, always giving satisfaction. Resisting all the elements, uniting metal joints securely and readily adhering to brick, stone, wood, iron or mortar, makes it the most suitable material to use for counter flashing.

## PRICES

Per pound (less than 100 lbs.), 13c.

Per pound (100 lbs. and over), 12c.



## OBELISK IRON CEMENT

Used with Obelisk Paint supersedes Tinner's soldering. Saves expense and prevents damages by rain in leaking roofs.

Applied to Wood, Brick, Stone, Tin, and Iron with Success

Never Fails. More Reliable than Lead Solder for Flashing and Repairing



# OBELISK IRON CEMENT

PATENT ALLOWED MAY 11, 1887

*It has gained a national reputation. ITS EQUAL HAS NEVER BEEN FOUND.* The only reliable compound on the market. After eighteen years constant use in all parts of the United States, applied to all kinds of roofing materials, in the capacity of a counter flasher, skylight protector, broken joints, seams and rust hole reparer, it has stood the test of time, and not one instance can be cited that it has failed to do the work perfectly, presenting no signs of deterioration. Flashing against parapet walls and around chimneys done ten and fifteen years ago, are as good to day as when first finished. Its superiority over lead solder is practically demonstrated by comparing its time test of work, applied to tin, iron or slate, both in the repairing of bursted joints and counter flashing. It readily adheres to brick, wood or stone, it is the only (Obelisk Iron Paste) medium through which iron or tin can be perfectly cemented to the above-mentioned materials, viz: wood, brick, stone and mortar, time and exposure only increases its durability on roofing work. To connect the metal in perfect contact with the fire walls, chimneys, skylight frames, etc., it has no equal. Solder can not do it, counter flashing with metal is only an apron to cover the separation, and solder will only temporarily seal the cut or broken corners. Expansion and contraction will soon burst them apart. Banking up of snow or ice, or a heavy drifting rain will force the water under the apron and over the two or three inches of turned up metal, admit water to run between wall or frame down on to the sheathing, and causes in many cases bad leaks. By using our Cement and Fiber Strips the contact is perfect and no water or rain can leak or find any inlet to under surface, the same applies to a skylight frame. All metal devices have failed, all kinds of cement proven of short life, but the Obelisk has never failed, it always remains flexible, but firm, and is only disturbed by mechanical forces.

No tin or iron roof can be perfectly laid or repaired without this cement is used. Tinnerns are slow to take hold of it, and discredit what we claim. But living proofs, dating back to 1869, kill its enemies, and defy any one to bring in evidence of a single failure we or our agents have made during the past fifteen years in all the millions of square feet of Tin and Iron Roofing that we or they have treated, stopping leaks in roofing proper, flashing roofs and skylights, and seven tenths of these roofs have been under the care of the most expert tinnerns in the city or town in which the men were located, and year in and out they have been paid large amounts for repairing without any good effect, the owners had met with heavy losses, in either damaged goods, falling plaster or both, and in many instances have been sued by the tenant for damages. And, as a last resort, the tinner condemns the roof and recommends as the only remedy a new roof. Under these circumstances over one-half of our work was taken, and in every instance we guaranteed to make a tight job and keep the same in good repair for the term of five or ten years. No pay until the work was thoroughly tested, and in very desperate cases, we have not received one dollar for a year or eighteen months after the work was finished. And there is not on our or our agents' books a single charge unpaid that was due, not a piece of work that has not only given satisfaction for its time specified, but has doubled the time and is still doing good service. All that is required is to lay aside your prejudice and apply strictly in accordance with directions, and time will prove to you and your patrons that it is the most wonderful roof protector ever made. It will stop any leak from whatever cause, in any kind of roof, be it Tin, Iron, Slate, Tile, Copper or Zinc. One hundred pounds of Cement Paste and five gallons Liquid Priming and Dressing, costing \$13.00, will do the amount of work that a tinner would charge \$100.00 for; and, if done with care, would give the desired effect, while the tinner's work would give out in a change of seasons, and old troubles appear—LEAKS.

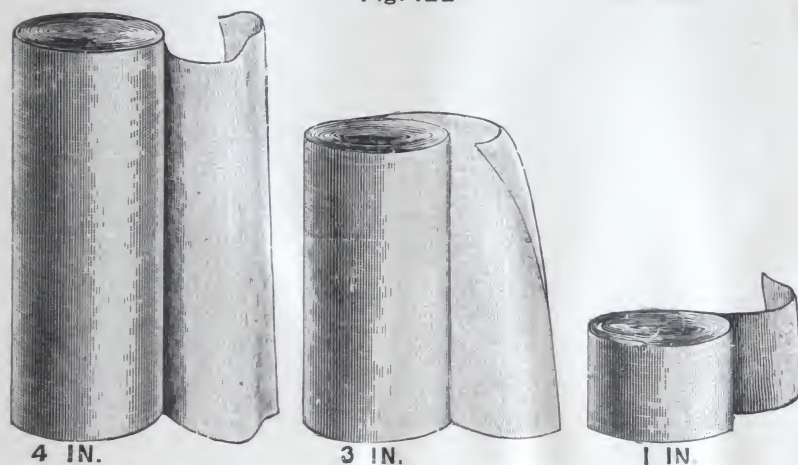
We give one illustration of a tin roof treated by us in 1875, in Baltimore, Md., on one of the largest machine works there (120 squares), we accepted this work at \$2.00 per square. This roof had been condemned by several of the best tinning firms in the city, and their bids were all in for a new roof (tin at that time was \$8.50 per square laid, no paint). We accidentally heard of it, and before the award, we had an interview with the owners, laid our treatment before them, and they considered the matter well, as the new work would cost \$1,224, as against our bid of \$240; so they proposed to give us the work, provided we waited eighteen months for the pay. At the end of that time, if the work proved all we claimed, and showed no signs of deterioration, then they would pay the bill with 6 per cent. interest added. We accepted, and at the end of the time the work was inspected, accepted, and bill with interest paid. In December, 1886, this work was re-examined and found to be equally as good as when first done, this is only one instance out of the thousands we could cite.



During the past six years in this city and State, we have treated over 500,000 squares of Iron and Tin work, at \$1.00 to \$2.00 per square, either direct from our firm or through our local agents. And to-day there is not a single patron who will say that it is not as represented, the only complaint which we ever hear is, it costs too much. But the people have been so imposed upon and cheated, that it has become almost a sealed rule to pay as little as possible for this kind of work.

Good material in the hands of an honest and experienced mechanic costs money, but for every dollar expended in honest work and first-class material, the consumer gets in return almost the dollar in the start, and in the end the investment has made \$3.00 for every \$1.00 so invested.

Fig. 122



Shows Fiber Patching Rolls, made from unbleached muslin, torn in strips 4, 3 and 1 inch wide, 12 feet long and put into small rolls ready for use. Four inch is used in counter flashing around chimneys, skylight frames at base, and parapet walls or adjoining buildings. Three inch is used for repairing cross joint seams and standing ribs. One inch for small breaks, skylight frame between the glass, etc.

Fig. 123



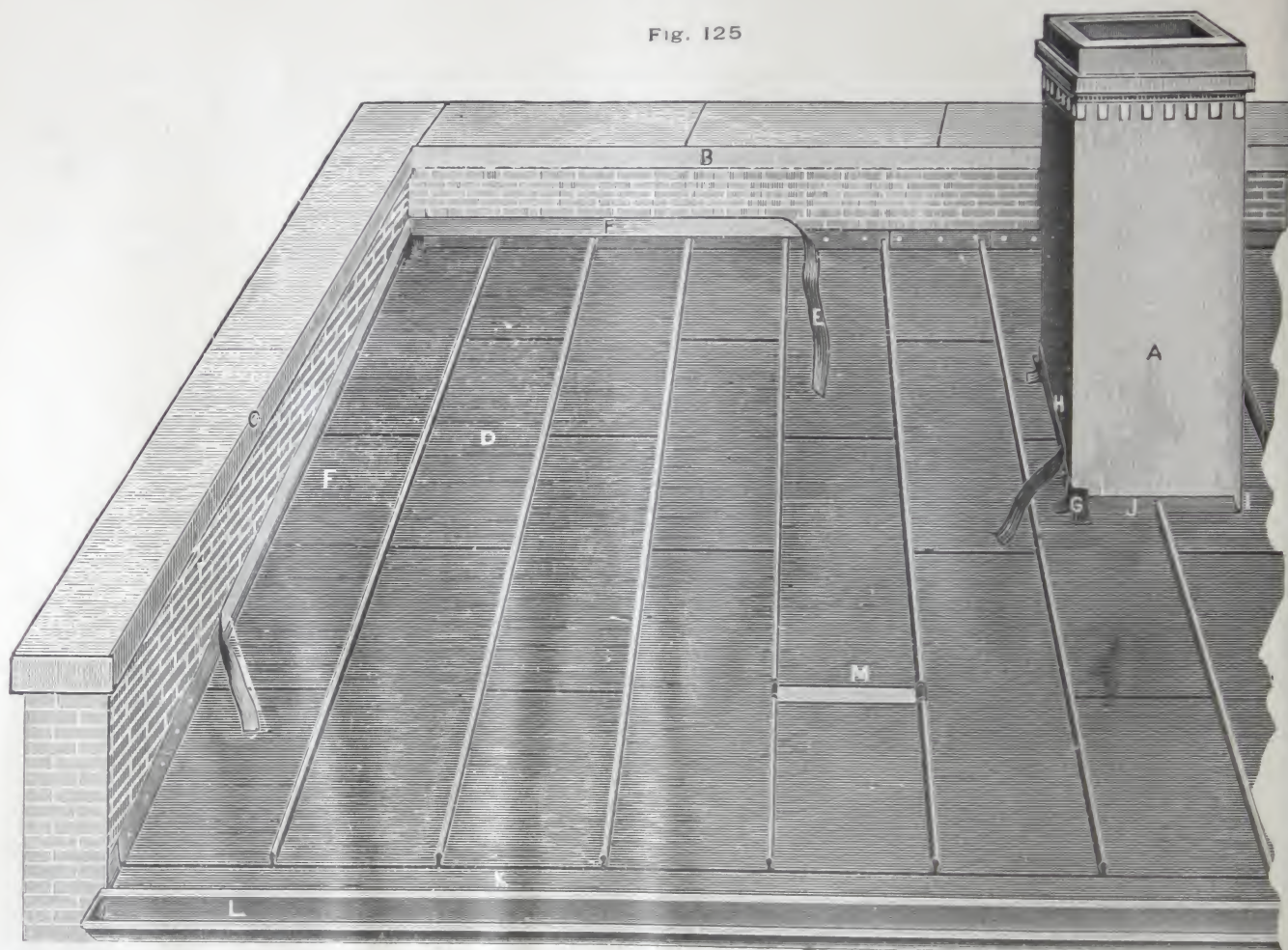
Fig. 124



Shows our metal buckets, which are used on roofs while at work. B—Obelisk Cement. A—Liquid Primer and Dresser. C—6 O Round Brush.



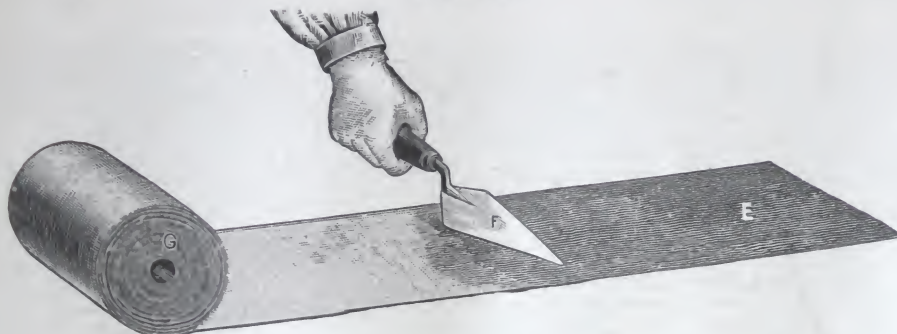
Fig. 125



Shows process applied to new work, especially adapted to finishing iron roofs. It applies equally as well to tin, zinc, copper, slate or shingles (tin or wood). A—Location of chimney. B and C—Stone flagging covering top of parapet wall. D—Roofing laid ready to flash and paint. E and F—Fiber Flashing spread with Obelisk Iron Cement and partly applied to the iron turn-up and brick wall. G—Mode of securing cut corners before counter flashing. H—Corner flashing applied upon corner finished, lower corners ready. I—corner before treating, flashing turned 3 inches and nailed, then apply corner fiber as in G, after applying the corner flashing as in H and F. J—Iron flange turned 3 inches. K—Roofing sheets hooked into box gutter lining. L—Box gutter lined with iron. M—Manner of finishing imperfect cross joint, before applying the fiber prime the place to be treated with Obelisk Paint, 2 inches on brick or wood, and 3 inches on iron; then spread the fiber smoothly with a trowel (spread it thin), as in Fig. 126. for corner prepare the fiber as in Fig. 127, after spreading the cement on the fiber, apply then as in Fig. 125, pat them smooth, allowing no air to remain between the patch and what it is applied to. Work out the edges into the cement, then paint over it, lightly filling the outside fiber, always apply the corner pieces first, then the last flashing as in letter F, Fig. 125. For nails and small breaks and rust holes, tear fiber patch long or square enough to cover the breaks one inch each way.



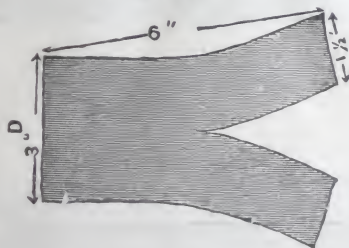
Fig. 126



Shows Fiber Roll in process of spreading with Obelisk Iron Cement before applying.

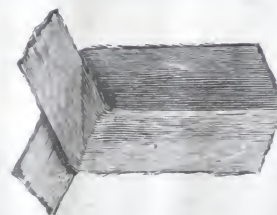
E—Cement spread on fiber before using F—Trowel used in spreading and smoothing the cement. G—Roll Fiber material.

Fig. 127



Shows corner patch or under flashing, used on all cut corners on roof, is made from a piece of 3-inch wide Fiber, 6 inches long, and at one end it is torn or slitted 2 inches deep, ravel out all the raw edges before spreading the cement.

Fig. 128



Shows concave corner patch or flashing for cut corners.

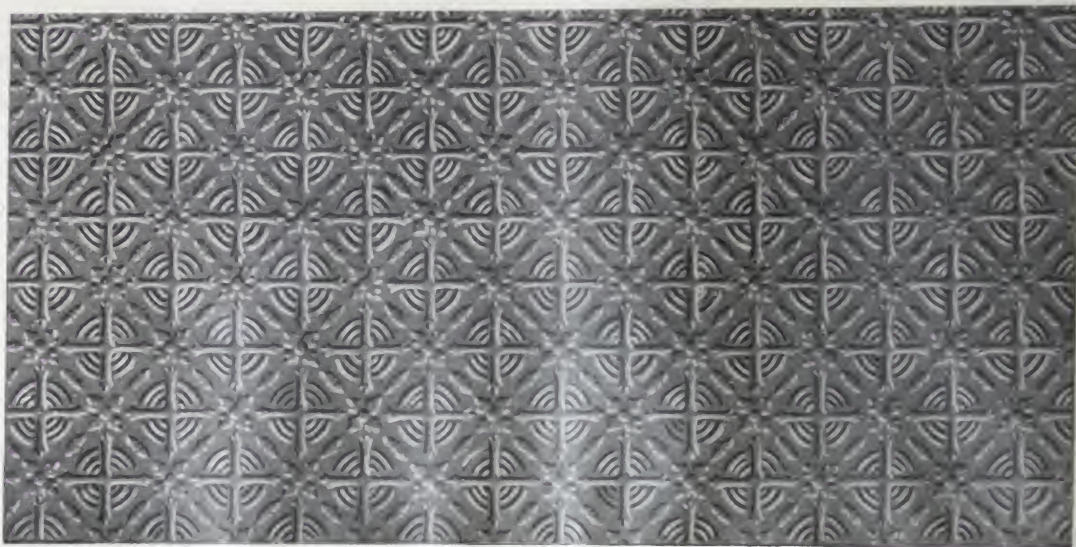
D—Shows shape of corner patch in letter G and upper corner of Fig. 125, also shows how to apply this corner patch on an inverted corner. Letter G it opens the base of fiber as shown. When applied to inverted corners, the base ends are lapped over one another, as shown in upper corner roof, Fig. 125 and Fig. 127½. Always pat them smooth and repaint them soon as applied. After the roofing is all treated, then proceed to paint, moving the brush lightly over the fiber flashing and patching. If convenient, and the job is large, it is best to do all the flashing and patching, and let it stand one or two days before painting the entire roof.

All Information as to Prices, Samples and Cost sent on Application

New York Iron Roofing and Corrugating Company



Fig. 547



Moorish Diaper (No. 1), 29 x 115 inches. Side Wall or Ceiling.

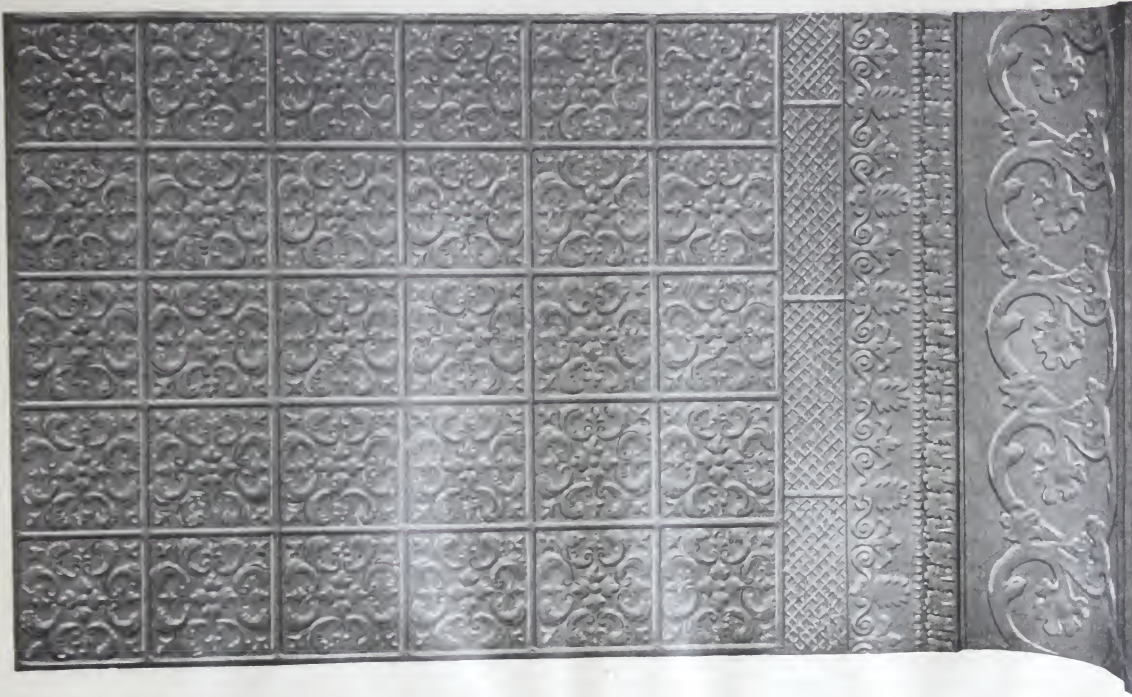
Fig. 548



Italian Renaissance (No. 1), size 18 x 96 inches. Side Wall or Ceiling.

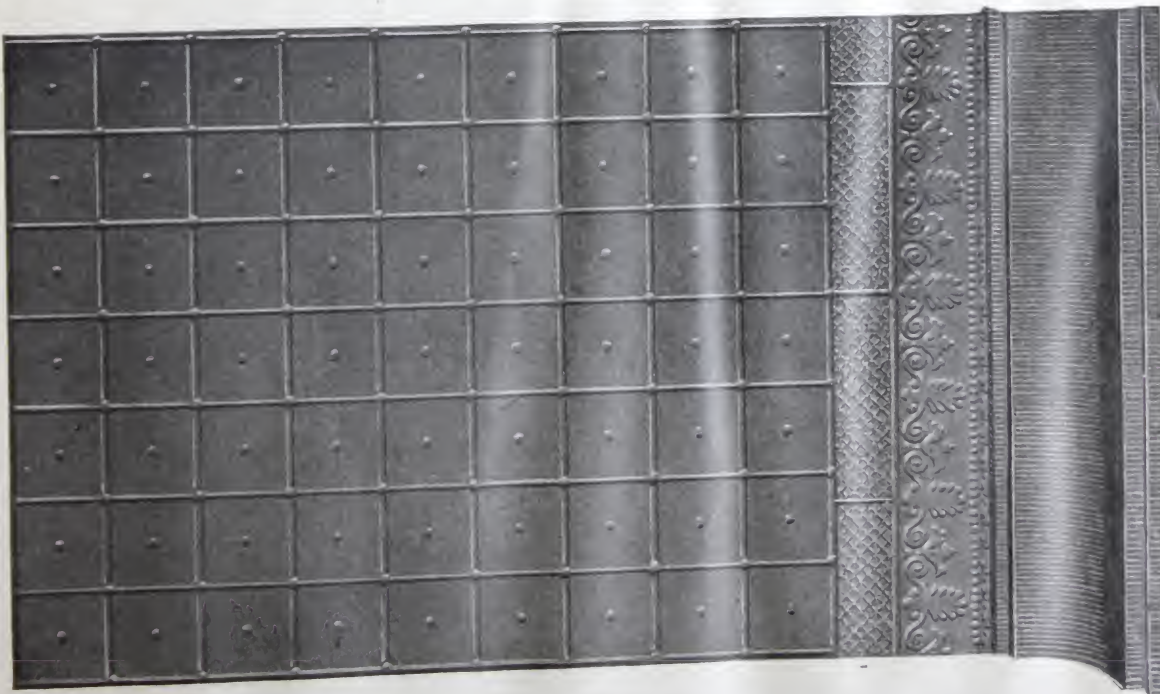


Fig. 546



Italian Renaissance Fret, (No. 2),  $5\frac{3}{4}$  inch squares. Field Sheets,  $29\frac{1}{2}$  by  $116\frac{1}{2}$  inches long. Roman Net and Mould Styling. German Renaissance. Cove, 11 inch girt.

Fig. 544



Italian, 4 inch squares. (Field Sheets), 28 by 98 inches long. Styling, Roman Net and Mould. Coincidence. Reeded, 10 inch girt.



Fig. 282

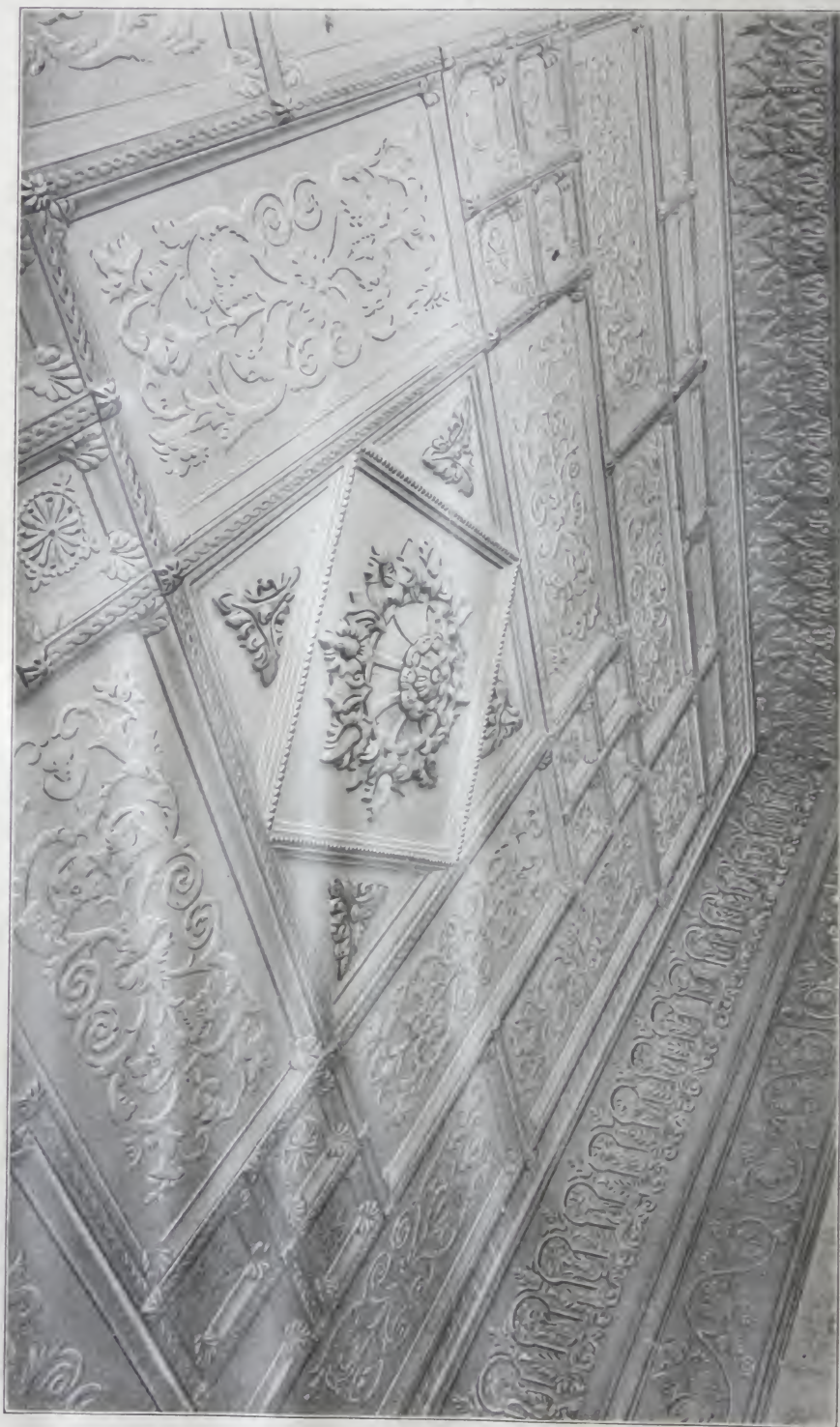




Fig. 297



Quarter Sections Empire Ceiling, Cove and Frieze.



## SPECIAL TO OUR PATRONS

*We sell a Square Standing Seam, or Roll Roofing, allowing for Side Seam, Laps, and no Laps allowed for Corrugated Roofing or Siding. All Material painted both sides with best Oxide Iron and Linseed Oil before shipping.*

*Cross Seams not allowed.*

### The Following Rules Govern our Quotations and Shipments:

1st.—**Pressed Standing Seam Steel Roofing.**—Using Separate Cleats, all styles, plain or figured centers. One square of Steel Roofing consists of  $6\frac{1}{4}$  sheets of Pressed Standing Seam. Painted both sides, one coat. Each sheet will measure in the clear 24 inches wide by 96 inches long or its equivalent. We furnish  $1\frac{1}{2}$  pounds Dry Iron Paint,  $\frac{1}{2}$  pound 1 inch Wire Nails,  $1\frac{1}{4}$  pounds Painted Metal Tongue Cleats and one-fifth pound End Cleats to each  $6\frac{1}{4}$  8 feet sheets. Applies to all separate Standing Seam Sheets, any style of Cleat.

2d.—**Roll and Cap, or Roll (Straight Cleat) Roofing.**—Using Separate Cleats plain or figured centers. One square of Roll and Cap Roofing consists of  $6\frac{1}{4}$  8 feet sheets, hooked and swaged together, or its equivalent. Painted both sides, one coat, and rolled for shipment; will lay 24 inches in the clear by 50 feet long (100 square feet). We furnish 50 running feet of Metal Capping for covering standing seam, (in Roll Roofing no Caps are furnished),  $1\frac{1}{4}$  pounds Metal Cleats,  $1\frac{1}{2}$  pounds Dry Paint,  $\frac{1}{2}$  pound Barbed Wire Nails to each  $6\frac{1}{4}$  sheets, or its equivalent (swaged together). We make these styles in widths of 24 inches after standing seams are made, put up in 100 square feet rolls, trimmed. Applies to all styles we make.

3d.—**V Crimped Iron or Steel Roofing.**—One square of Iron Roofing consists of  $6\frac{1}{4}$  sheets of Crimped Sheet Iron, painted both sides, one coat. Each sheet will measure in the clear 24 inches wide by 96 inches long or its equivalent. We furnish  $1\frac{1}{2}$  pounds Dry Iron Paint, 1 pound Wire Nails,  $1\frac{3}{4}$  inches, and 50 running feet Wooden V Strips and one-fifth pound End Cleats to each  $6\frac{1}{4}$  sheets.

4th.—**Corrugated Iron or Steel Roofing and Siding.**— $2\frac{1}{2}$ ,  $1\frac{1}{4}$ ,  $\frac{5}{8}$ ,  $\frac{3}{8}$ ,  $\frac{1}{16}$  inches Beaded Centers. One square of corrugated Iron or Steel consists of sheets in any length from 1 to 10 feet, by 26 inches wide, to make 100 square feet of surface, painted both sides, one coat. Each sheet will measure 26 inches wide by its length. We furnish  $\frac{2}{3}$  pound  $1\frac{1}{2}$  inch Wire Nails and  $1\frac{1}{2}$  pounds Dry Mineral Paint to every 100 square feet of corrugated surface.



5th. **Sheet Steel Clapboards (or Weather Boarding).** One square of Steel Clapboards consisting of  $6\frac{1}{2}$  sheets. Painted both sides, one coat. Each sheet will measure in the clear  $22\frac{1}{4}$  inches wide by 96 inches long. We also furnish  $\frac{2}{3}$  pound 1 inch Wire Nails and  $1\frac{1}{2}$  pound Dry Mineral Paint to every  $6\frac{1}{2}$  sheets.

6th. **Sheet Steel Brick, Siding and Wainscoting.** One square Brick Siding consists of 5 Perfection Brick sheets 30 by  $96\frac{3}{4}$ , old style, or  $9\frac{1}{2}$  sheets,  $50\frac{1}{2}$  inches long by 30 inches wide or its equivalent, painted both sides,  $\frac{3}{4}$  pound  $\frac{3}{4}$  inch Wire Nails and 1 pound English Red Mineral Paint. We make two lengths in these styles.

7th. **Cluster Steel Shingles.** One square of Steel Shingles consists of  $7\frac{1}{2}$  sheets 81 inches by 25 inches or its equivalent. Each sheet will measure in the clear (allowing laps and seams)  $6\frac{1}{2}$  by 25 inches or its equivalent. Painted both sides, provided with 1 inch flat margin at sides, Pressed Standing Seam or Double Beaded on sides.  $1\frac{1}{4}$  pounds two-in-hand Steel Cleats (or any other style we make),  $1\frac{1}{2}$  pounds Dry Paint,  $\frac{1}{2}$  pound 1 inch Wire Nails, 1-5 pound Lead Washers for End Joints when Pressed Standing Seam Edges are used,  $\frac{1}{3}$  pound when Beaded or Flat Edges are used.

8th. **Roll Roofing, with Metallic and Gum Filled Cap.**—Trimmings furnished are same as in Roll and Cap, except we send Ground Metal Powder and Liquid Gum for mixing and filling the Caps. Viz: to every 100 square feet of Roll Roofing, one-tenth gallon Liquid Gum,  $1\frac{1}{2}$  pounds Metallic Powder.

The above rules govern our shipment and claims. Patrons making claims for short shipments must examine their goods as above, and if any shortage is found make complaint at once, so we can make good the shortage. No claim allowed after goods have been worked into roofing on the buildings, as we are not responsible for mis-cuts or bad workmanship, but do hold ourselves for full shipments of sheets and trimmings as above named.

We do not sell at wholesale prices and measure the roof after it is laid, but give you prices on these goods in quantities with the necessary trimmings as above stated, and if they are short when received we will cheerfully make up the loss, but in no instance will we make the allowance after the same has been used, and by some mismanagement the workman fails to cover all that the buyer would wish. So please bear this in mind, and upon the receipt of the goods see that it tallies with our list on invoice. If any discrepancy appear, notify us and the shortage will be made good.



*In making Representations as to your manufactured wares, and what you deliver for value received, be plain and explicit; do not mislead, but rather do a trifle more than advertised in favor of purchaser.*



Fig. 100

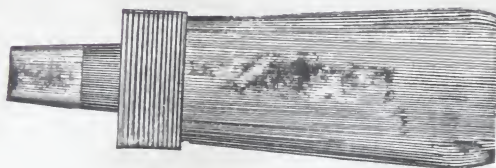


Sash tool for cutting in. 40c.

Fig. 263

Trowel.  
90c. Used for Preparing Flashing.

Fig. 106



Round 6-o Brush. \$2 00.

Fig. 253

Shows Cement and Paint Buckets, 1 to 10 gallons,  
cement, 5 to 300 pounds.

Fig. 254



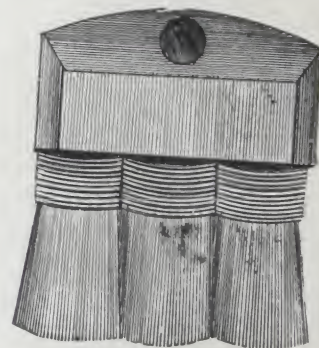
Shows 9 inch, Flat Long Handle Brush. Price, \$2.50.

Fig. 107



Flat 5 inch Brush. \$2 00

Fig. 252



Shows 3 Knot Brush. Price, \$3.50

### Directions for Applying Sagendorph's Metallic Cement for Stopping Leaks.

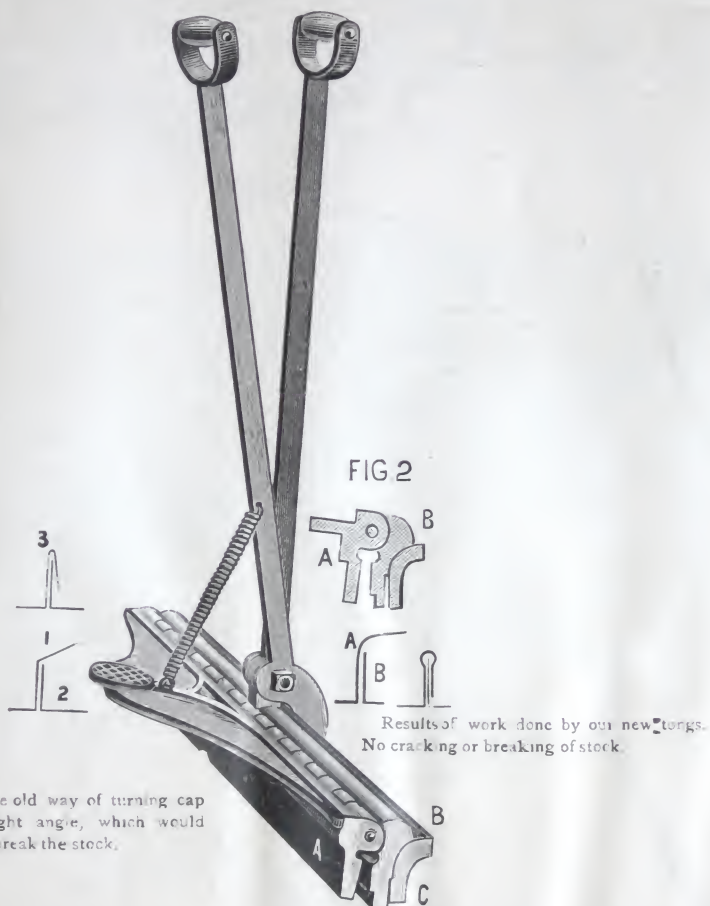
(UNDER SAGENDORPH'S PROCESS) Patented June 7, 1887

In applying this cement the following directions must be carefully observed: First, paint all holes or breaks with our Sagendorph Obelisk Paint, and after that is done, apply the cement as follows: For small nail and rust holes put a small lump of cement into the hole so as to cover and fill it, allowing the cement to stand a little above the surface. For broken seams, large holes, fixing chimneys, skylights or counter-flashing, the following must be carried out: Pages 71 and 13, Figs 22 and 12. First take good cotton unbleached muslin, tear it in strips large enough to cover one inch each side of the break (our Fiber Rolls are prepared); take a trowel and spread the cloth fiber lightly over it. Be sure and allow enough cloth to cover each side of the break by one inch. After all the patching is done, paint the roof with our Sagendorph Obelisk Paint. If the roof has many leaks and requires a great deal of patching, it is best to do the patching and let it stand a day or so before coating the entire surface. This gives the patches a chance to set. If our directions are carried out, your roof will remain free from leaks for years. This cement, in connection with the cotton fiber patches, makes perfect contact of metal to shingle, slate, brick, stone or mortar. It readily adheres to any of the above named, effectually excluding water, and will prevent or stop leaks in shingle, slate, tin or iron roofs. The best counter-flashing material for roofers and tanners to use. We furnish Patching Fiber in rolls, 12 feet long by 1, 2 and 3 inches wide ready to spread with cement and apply.



PRICE \$6.00 NET

Fig. 456½



Shows the old way of turning cap seam at right angle, which would crack and break the stock.

### Our New Roll Fold and Squeezing Tongs

A—Outside squeezing lips. B—Inside turning lips. C—Lip that goes over the outside seam, having the cleat attached, and turn high seam over low seam as A and B, Fig. 2.

Fig. 108



Valley Steel, Painted, in widths of 10 inches to 30 inches, any length in rolls, per square foot, 5c. For Tin or Galvanized add 3c. to above.



Used with all Metal Goods.



List of Tools necessary to use in applying any of the Manufactured Goods Illustrated and explained in this Catalogue to insure a perfect and durable job.

Fig. 109  
SQUEEZING TONGS



Used with Roll Cap or Pressed Standing Seam Roofing \$2.00

Fig. 112



Two sizes, 1 and 1½ inches  
\$2.00 per pair. Used with Roll Cap Roofing and Roll Roofing

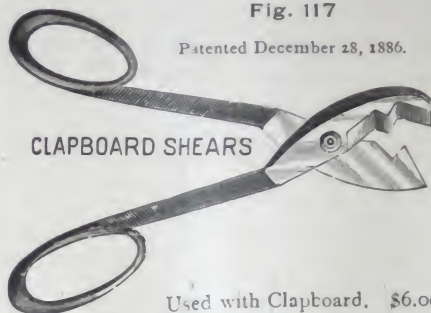
Fig. 116



Used on Pressed Standing Seam Roofing, and Extra Cleat V Crimped Roofing. 50c.

Fig. 117

Patented December 28, 1886.

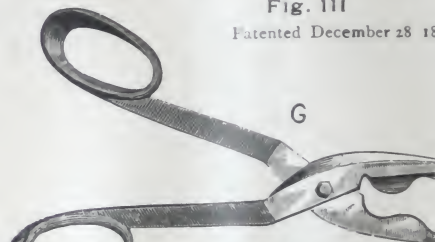


CLAPBOARD SHEARS

Used with Clapboard. \$6.00

Fig. 111

Patented December 28, 1886



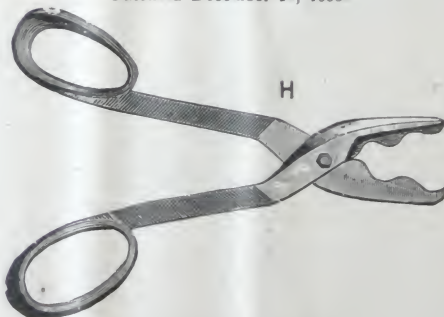
2 1/2 IN

CORRUGATED SNIPS

\$6.00 Used with 2 1/2 inch Corrugated Iron.

Fig. 114

Patented December 28, 1886.



H

CORRUGATED SNIPS.

\$6.00 Used with 1 1/4 inch Corrugated Iron.

Fig. 118

Patented December 28, 1886.

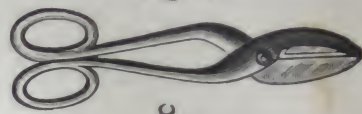


3/8 IN.

CORRUGATED SNIPS

\$6.00 Used with 3/8 inch Corrugated Iron.

Fig. 110

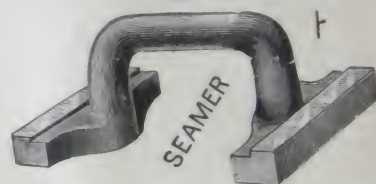


C

STRAIGHT SNIPS

Used with all the articles. \$1.50.

Fig. 113

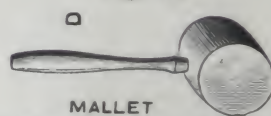


t

SEAMER

Used with Roll Cap or Pressed Standing Seam. \$1.25.

Fig. 115



MALLET

Used with all our Roofing. 25c.

These tools kept in stock, and we recommend all Agents to use the set complete. To consumers, we send the necessary tools, and allow the same to be returned to us at their expense, provided none are broken.



# ROCK FACED STEEL PLATES

Fig. 1278



Size of sheet 18 x 28 inches, or  $3\frac{1}{2}$  square feet to the sheet,  $28\frac{3}{4}$  sheets to the 100 square feet.  
Corner Plates in Belt Line

This style is intended to be used as a belt at base, or a dividing line between stories, also as corner finish, and in combination with our Steel Brick or smaller Rock-Faced Plates, as in Fig. 1277 or 1502.

Size of Stock Sheets, 28 x 18 inches; size of Rock-Faced Stone, 14 x 9 inches.

Four plates to each sheet.

Flush mortar lines. Can be used in full sheets or separate, cutting plates as desired between mortar lines.

## A PERFECT WATER TIGHT LAP JOINT



# FLUSH MORTAR LINE ROCK FACED METAL COVERING

Manufactured under First and Original Patents

MADE FROM SHEET COPPER OR ZINC WHEN DESIRED

SPECIAL PRICES QUOTED

Mechanical Designs—1887, 1889, 1891, } *Nine Patents*  
 Machines—1889, 1893. } *on Metal Sidings*

BORDER PLATES FOR SIDINGS

Fig 1277



Size of sheet, 28 x 48 inches, or  $9\frac{1}{3}$  square feet to the sheet,  $10\frac{1}{4}$  sheets to 100 square feet.

Size of Stock Sheet, 28 x 48 inches; size of Stone, 24 x 7 inches.

The Stones of Fig. 1277 are in size 24 x 7 inches, and the Mortar Line of this plate will match and lap with plate 1278. Whenever Steel Brick or Rock Faced Plate 1277 are used with combinations of Rock-Faced Plate 1278, we furnish the outside edges of Plate 1278 with flat margin offset  $\frac{3}{4}$  inch deep (See Fig. 1501), to lap and butt the Brick Plates or Rock-Faced Plates over to edge of margin or corner finish. Always state when ordering what style of finish you want shipped for corner Belt Line.



## ROCK FACED STEEL SHEETS

Fig. 1501



Showing how to use our Sheet Plates as Belts or Corner Blocks. When wanting Corner Blocks, always give us the lineal feet wanted, so that we can prepare the outside edges, as in Fig. 1501.

Fig. 1502

Shows Fig. 1278 prepared for Corner Finish and to be used as in Fig. 1502.

Always state the amount of lineal feet required for corner, and we will prepare the edges and charge extra for time to do this work.

When used as Corner Finish always back inside with  $\frac{3}{4}$  inch boards width of Stone Block, on each side.

Shows 1501 bent at right angle in Center Mortar Line for Corner and Body Plate Fig. 1277 applied. Fig. 1277 used for Main Covering on body of building.





Fig. 129



Elizabethan Tile.  
Size, Centers, 25 x 32 inches.

Fig. 130



Shows Fancy No. 2 Ridge Cap.  
Painted Steel, per lineal foot, . . . . . 14 cents  
Galvanized Steel, per lineal foot, . . . . . 16 "  
Ends charged as one foot. 15-inch Finial, each \$3 00

Fig. 131



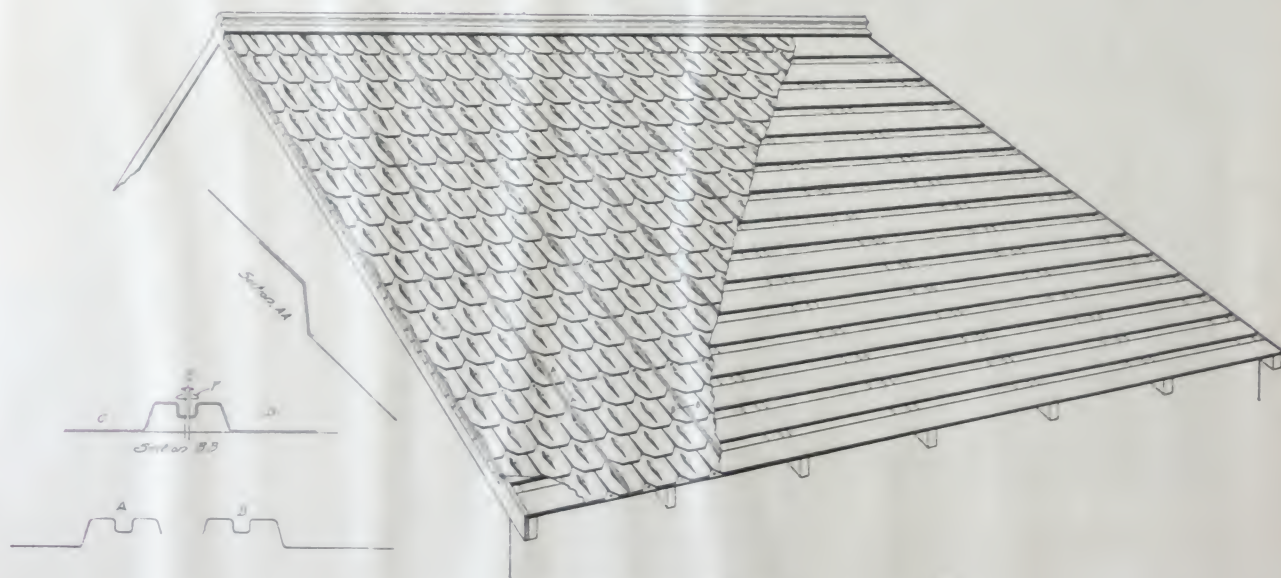
No. 12 Washer.

Fig. 132



1 1/2-inch nail

Fig. 133



Elizabethan Tile Plates.

A—Side Seam B—Overlapping Side Seam. C, D, E and F shows Side Lap, Nail and Lead Washers.  
Section AA shows Cross Lap.



## TO OUR READERS AND PATRONS

---

# DIRECTIONS FOR MIXING THE DRY METALLIC PAINT

WE SHIP WITH OUR  
ROOFING AND SIDING ORDERS

---

### PAINTING ROOFS OR CORRUGATED SIDING

To every 10 pounds of Dry Metallic Paint add one gallon of Boiled Linseed Oil and one pint of Japan Dryer. Stir well and let this stand and soak before using at least twelve hours, then stir well, and apply with flat brush or sweeps, as per our paint directions; one gallon will cover well 400 square feet of metal surface, if mixed as above. To make the paint any thinner only reduces the lasting qualities, and is not advisable.

### PAINTING AND STRIPING STEEL BRICK

To every twelve pounds of English Red add three quarts of turpentine and three pints of good Boiled Linseed Oil; mix well and apply with flat hand brush. If it sets with a gloss (and you desire it flat, to imitate natural brick), add more turpentine. After this coat has set, take white lead (or brick) ground in oil, reduce its thickness one-fourth with turpentine, and put a small quantity on a flat surface (piece of glass or thin piece of wood), and work this into the stripers, to fill the bristles; then stripe the mortar bead lengthwise, first using the largest stripers (the cross mortar lines uses the medium stripers). You can make mortar line either black or white, to your taste in the matter. The steel brick can also be coated with salmon color (or medium yellow) and striped with four shades darker, blue or red. Salmon-colored brick are all the rage now, and many architects specify this color in their latest architect work in buildings.

**Use Our Paint and Cement Directions, pages 62 and 63. Tool List, page 72.**

**This will enable you to do a perfect job.**



## IMPORTANT NOTICE

---

To insure protection to the under side of **Iron or Steel Roofing and Siding or Clapboards and Brick**, retain the warmth of the interior in the winter and exclude the heat in summer ; also prevent condensation (or sweat) when the temperature is freezing or below, we recommend laying between the roofing and sheathing a layer of **Roofing Paper**. We keep four grades, known as follows :

**First.—Felt Paper Lining.** 35c. per square, - - (100 square feet).

**Second.—Asphalt Paper Lining.** 40c. per square, “ “

**Third.—Glazed Paper Lining.** 25c. per square, - “ “

**Fourth.—O. K. Manilla (Asphaltum Filled).** 45c. per sq., “ “

This addition adds tenfold to the lasting qualities of either tin or steel when used for roofing or siding. We advise the use of one of the above with all our goods. O. K. is the superior quality.

---

We also keep in stock the best Linseed Oil and Japan Driers to supply our customers, put up in one gallon to fifty gallon packages.

---

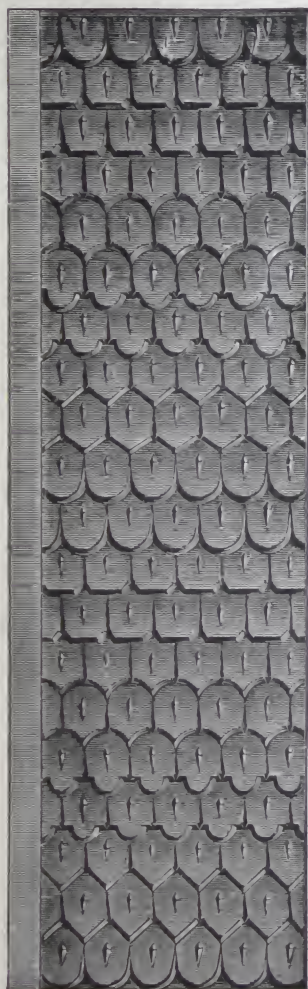
One gallon of Linseed Oil and one pint Japan Drier mixed with ten pounds Iron Dry Paint will cover 400 square feet steel or iron roofing, one coat.



1st. As in Fig. 134, the sheets are made with one inch margin (flat) at one side and sheared even with the tile on opposite edge; this will permit of lapping the sheared side on the flat margin of next sheet, as in Fig 134, for gables.

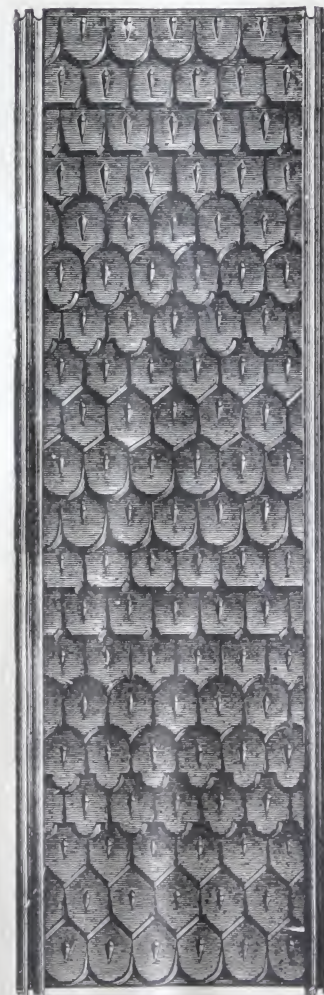
2d. Fig. 135 and 136 shows Beaded Edges on the sheet, as in Fig. 136, and laid as roofing, Cross Joints made as in Fig. 135. This style is used both on Pitch roofs or Mansard, as in Fig. 137. We also recommend using this style Roofing Center with a Pressed Standing Seam, as in Fig. 137½, and Two-in-Hand Cleat, Fig. 115. Fig. 135 shows Cross-Lap Joint, using Lead Washer; Fig. 131, Lead Washer, Fig. 132, Wire Nail.

Fig. 134



Shows full sheet with single edge flat  
One side sheared even with tile. This style  
for covering gables.

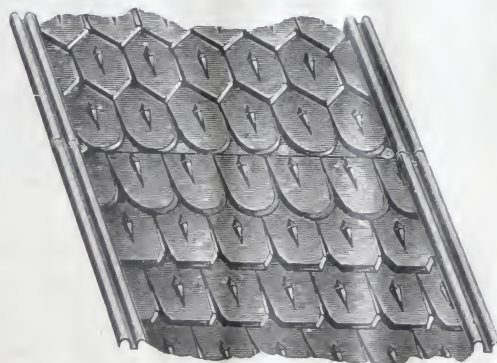
Fig. 136



Cluster Shingles, with Double Beaded  
Edges, for Siding and Mansards, lapped Cross  
Seams, using Lead Washer under nail head

The Cross Joint of this Lap is made by  
lapping the bottom course over the upper  
course of lower sheet and painting between  
the plates, then nailing, using lead washer  
under nail head

Fig. 135



Shows Cross joint made with Beaded  
Standing Seam

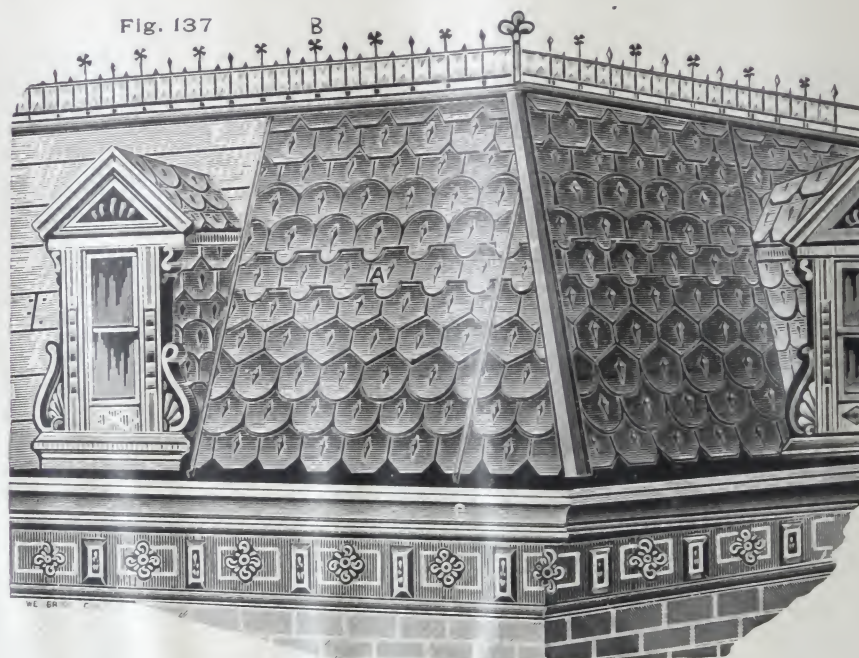
**We are discovering new principles, new powers, new materials, and new devices every day, and no one can predict the possibilities of the future.**



# CLUSTER STEEL SHINGLES

FOR ROOFING, MANSARDS, AND SIDING

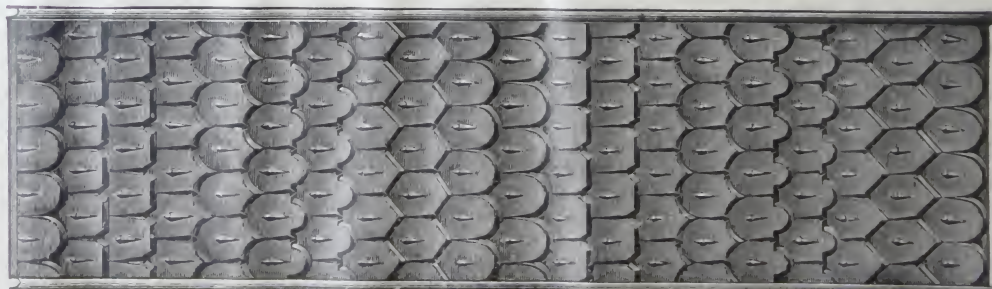
*CLUSTER STEEL SHINGLES LAID ON MANSARD AND DORMER WINDOWS, HAVING BOX GUTTERS*



Shows our Steel Tile Shingles, applied to Mansards.

A—Mansard partly covered. B—Iron Cresting. C—Box Gutter Cornice. D—Dormer Windows, covered side and top. E—Sheathing Boards. F—Beaded Edges on flat margin, Lap on Cluster Sheet. Sheets made in length, 2 to 10 feet; width, 25 inches.

Fig. 137 1/2



Shows Cluster Shingles, with Pressed Standing Seam Edges applied with Two in Hand Cleat.



We use strictly pure Sheet Steel, weighing 80 pounds to the 100 square feet with trimmings. Each sheet is 2 feet wide by 81 inches long, having five different designs of tile pressed into its surface, representing five different styles in each cluster sheet, making a total of 120 tile all in one Steel Sheet, not as liable to leak as smaller sheets, owing to having less number of side and end joints. In a roof of this kind the end joints can be formed by hooking or lapping one-half shingle, as in Fig. 140, and nailing at base of each shingle or tile, using a wire nail and lead washer. The side seams are formed in three different ways:

1st. Flat edges one side sheared even with the tile and lapped on margin flange nailed at base of tile, using lead washer under nail.

2d. Manner of laying: We press a Standing Seam on the edges, Fig. 140, and lay the same as Pressed Standing Seam Roofing, using our Patent Two-in-Hand Cleat, as in Fig. 139.

3d. Manner of laying: Sheets being of the best quality steel, the edges can be double-beaded.

Any of the above devices are good and practical. We recommend the Pressed Standing Seam edges, Two-in-Hand Cleat, as per directions of Pressed Standing Seam. For Siding, sheets are shipped with flat edges, one side sheathed, or double bead on each edge—flat edge; lap and match the adjoining sheet; nail at intervals to fasten sheets to sheathing, and lap cross joints and nail, using washer. Fig. 110 shows roofing tile or Cluster Shingle being applied, part of the roof laid, sheets Beaded Edges and ready to lay another course. We recommend using Two-in-Hand Cleat, as in Fig. 138, with Pressed Standing Seam edges, Fig. 137½.

Fig. 138



Shows Tongue Metal Cleat as shipped

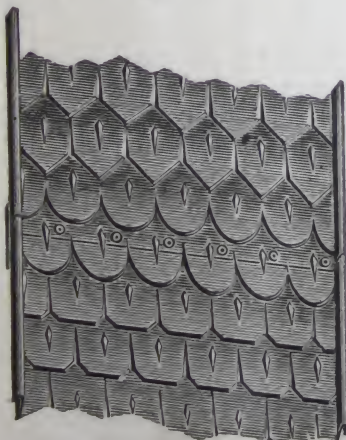
Fig. 139



Shows Tongue Cleat bent, ready to place over standing seam. The perforated end of Cleat goes on sheathing.

The finest and strongest Metal Cleat made. We advise its use on all Standing Seam devices, or Roll and Cap Steel Roofing.

Fig. 140



With Pressed Standing Seam edges, using Two-in-hand Cleat.

Shows lapped cross joints and mode of fastening, using lead washers and wire nails; at top of sheet paint the upper end of shingles with thick paint, then lap in grooves the next sheet; press it down into the under plates and nail between each line of tile, using the lead washer with each nail. This will make a neat and perfectly water-proof joint.

Fig. 141



Shows ¾-inch Wire Nail.

Fig. 142



Shows Lead Washer.

The Original Inventor, the man who has the papers, the man who has spent the money, should be given the benefit of the doubt in a patent case **AGAINST PUBLIC INFRINGERS**



# PERFECTION STEEL BRICK

SACENDORPH'S PATENT STEEL COVERING  
COVERED BY TEN PATENTS

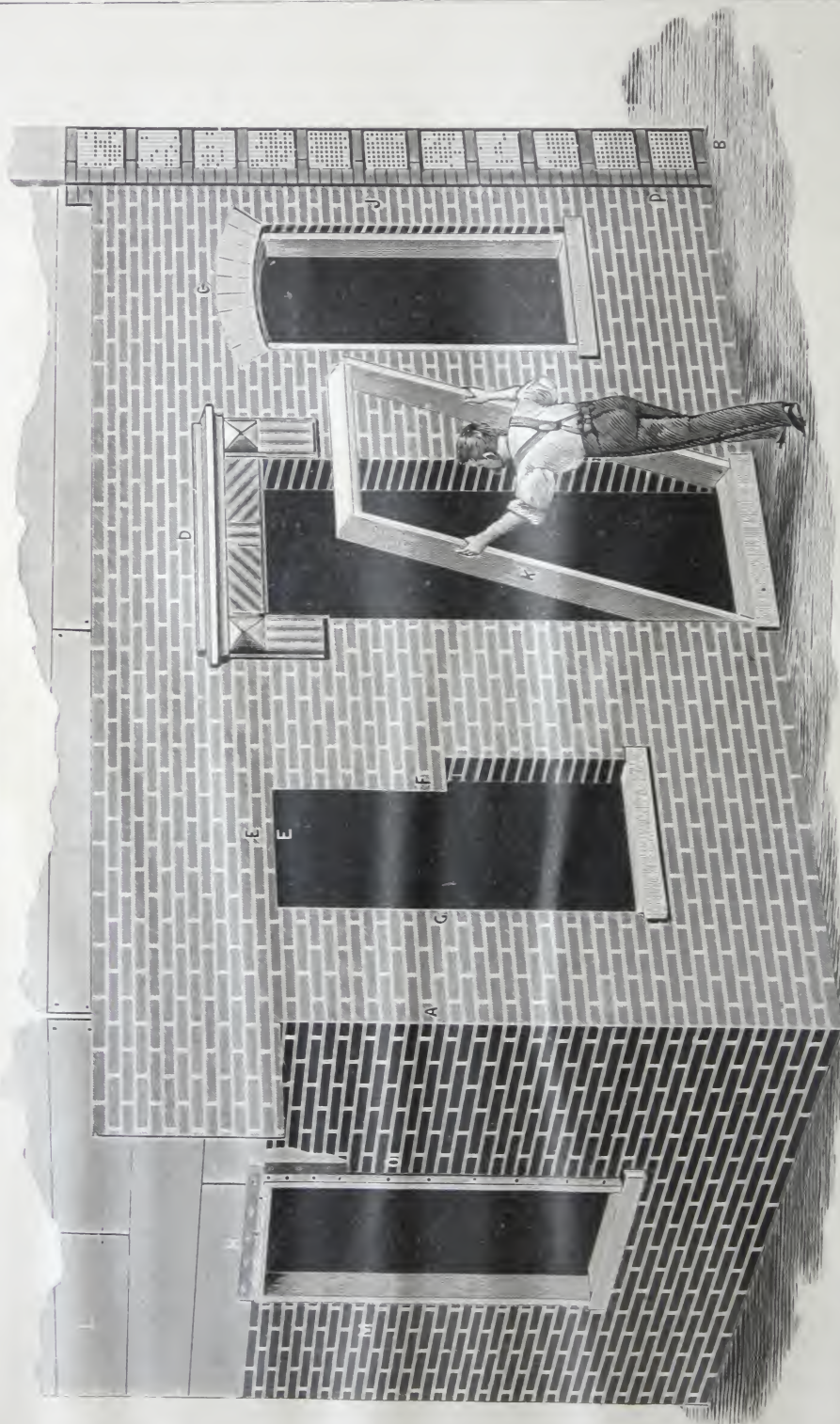


Fig. 147. Shows process of applying our Steel Brick, applications of Stone Panel Corners and Door Caps, how to turn a corner with the plates when no corner castings are used, also how to apply and bend around door and window opening to represent a genuine brick structure.

A—Corner finished with the Steel Brick Plate; this is accomplished by letting the plate project over the corner 8 or 16 inches, even with perpendicular around the corner. Nail the plate fast on the side first, then take a board 4 in. wide by 1 1/2 in. thick, place this against the projecting end of plate, and bend it around the corner to place on the side following, as in cut (Fig. 147), above letter A; then nail fast and continue to next corner. B—Corner finished with Stone Panel, as in Fig. 159, page 84. C—Window opening finished by letting the plate project over opening 2 1/2 in., and turning over on the inside of same and nailing and placing window frame in after it is finished. D—Door with Galvanized Cap, and opening finished with plate turned, and putting in door frame. E—Upper part of window opening finished without caps, and margin of plate (as in letter F), not turned, but ready to be, as in plate below. F—All turned and nailed. G—Brick Window Cap, made as in Fig. 607, arched; we also make them straight, as in Fig. 608. H—Shows frame in, and projects 1 inch beyond sheathing. When like this we recommend using angle stock, 3/4 inch by 1 inch, to nail on first; then butt the plates against the flange lip, and nail. K—Putting in door frame after steel plates are applied. This illustration, if carefully studied, will convey the practical methods of applying our steel plate and attachments. No original stone or brick can equal these products for beauty and uniformity of finish, if the proper care is taken when putting on the different styles and designs we make.



# PERFECTION STEEL BRICK

## SAGENDORPH'S LATEST STEEL COVERING

Patented July 29, 1890, March 24, 1891 (two patents); June 9, 1891; February, 1892, three patents allowed (not issued); March 29, 1892. Patented in ENGLAND and CANADA. Tenth Patent pending.

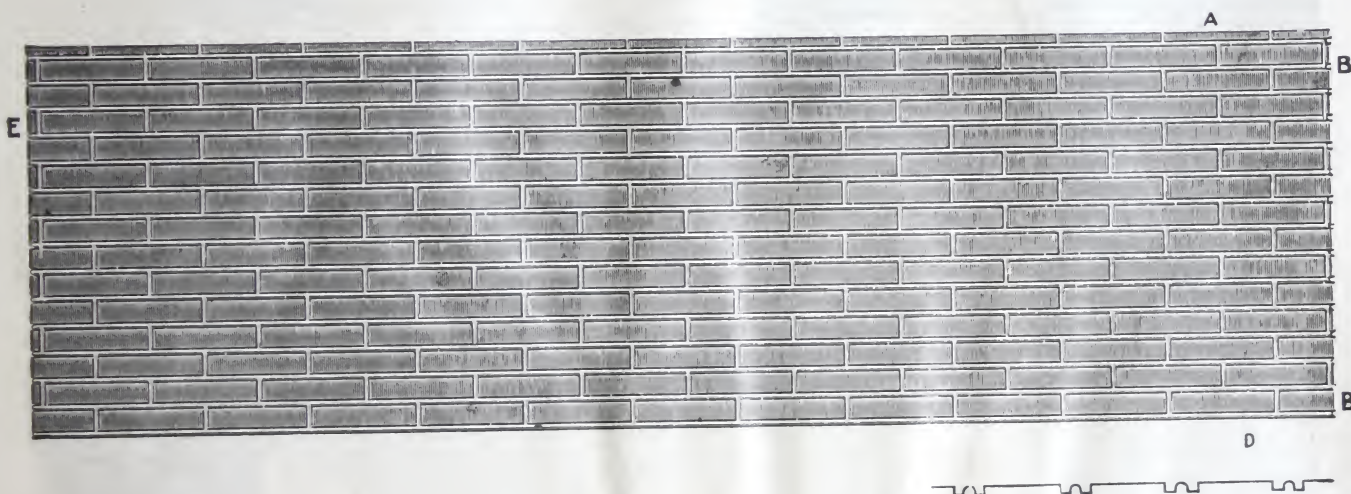
**Reeded Faced Steel Brick, with Double Beaded French Mortal Lines.** Regular stock sheets, 30 inches wide by 96 inches long

NOTE.—Either side to the weather is correct in applying this siding.

**Sample of our New Style Steel Brick, 26 Gauge Steel, sent on application.**

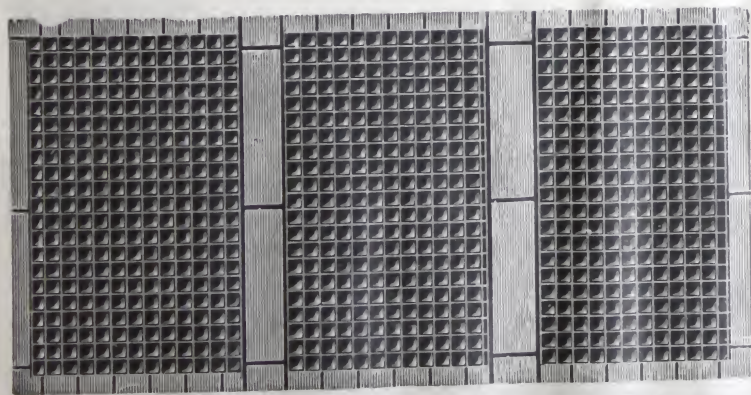
This style cannot be obtained of any other Company or Manufacturer. We control its sale and product. Only one responsible dealer in any city or town can handle these goods

Fig. 148



Shows full sheet Perfection Steel Brick 30 inches wide by 97 inches long

Fig. 149



Shows our Stone Panel Sheets in the flat, 26 inches wide by 120 inches long.

From 4 inches to 28 inches wide by 120 inches long. Used in trimming of building, if desired to divide the stories and resemble a line of Ohio stone panel, also for center stone line in first story, corner finish, etc. (See Fig. 143, page 49.)



# DIRECTIONS FOR APPLYING OUR ROLL AND CAP STEEL ROOFING

*WHEN USING THE FILLED CAP ON ROOF HAVING A LOW PITCH*

ROLL AND CAP STEEL ROOFING, USING TONGUED METAL OR TWO-IN-HAND CLEAT

WITH OUR GUM FILLED CAPS FOR FLAT ROOFS, HAVING LONG WATER RUNS

Patented October 14, 1884, and January 16, 1885.

Machine Patented February 26, 1889.

Patented June 18, 1889, and April 9, 1890.

Fig. 46½



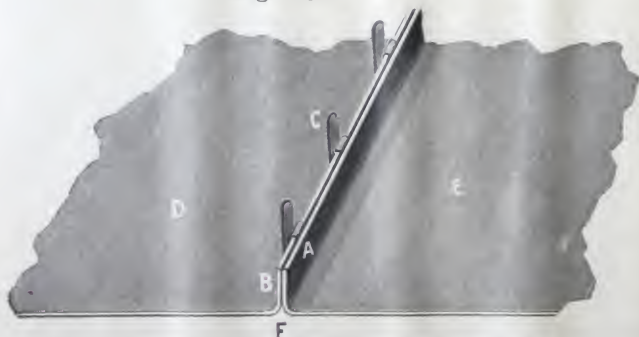
Shows Roll with 1 inch turned on the edges, ready to lay and cleat. Using metal cleats as shown in Fig. 231.

Fig. 581



A—Cap. B—Filling C—Open edges of Cap.  
Shows Cap filled with Gum Filler, for placing over Standing Seam as in Fig. 582.

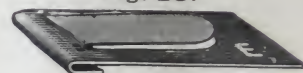
Fig. 582



Shows Standing Seam turned, cleated and butted ready for placement of filled cap, as Fig. 581.

A—1 inch single edge. B—Second sheet with 1 inch edge butted close to A. C—Two-in-hand cleat. D and E—Sheet proper.

Fig. 231



Shows Tongue Metal Cleat as shipped.

Fig. 232



Shows Tongue Cleat bent ready to place over Standing Seam. The perforated end of Cleat goes on sheathing.

Fig. 583

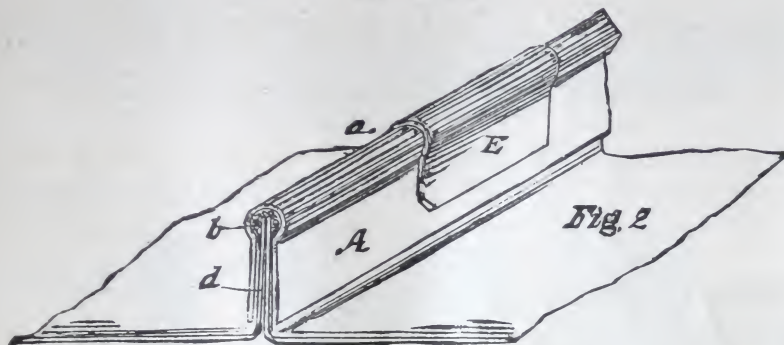


Shows Standing Seam finished with filled cap.

A—Cap closed. B—Cleat turned and closed around cap.  
C—Edges of sheets in Standing Seam and Gum Filler. D—End view of finished seam. E and F—Sheet proper.



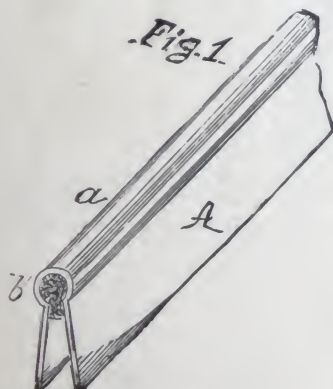
Fig. 583½



Filled Cap Seam closed with Tongs.

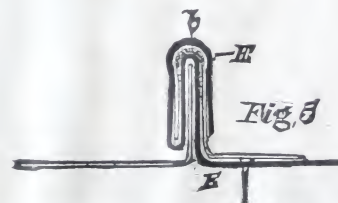
NOTE.—This mode of applying is the same as on page 36, and the same roofing devices, except filling the cap with powdered mineral and liquid gum. This is for flat roofs, and if put on as we direct, the roof will never leak at Standing Seam or Cross Joints. When you want this style always say with Gum Filler; this costs about 25 cents per 100 square feet, complete, extra. To apply the filler, mix the Liquid Gum with Powdered Mineral to the consistency of thin paste, then fill the cap half full, as in Fig. 581½, then place it over the standing edges of roofing plates, as in Fig. 582, and squeeze tight with our tongs; results will be as in Fig. 583. Fill the seams of valleys or gutters same as Standing Seam before closing with mallet.

Fig. 581½



Filled Cap

Fig. 584



End View Filled Cap applied before squeezing tight.

### TO MIX THE FILLER

One gallon gum—Add 14 pounds dry mineral, stir well, and fill cap. After applying caps and squeezing, take up the paste that oozes out and put it in the next cap to be filled.

### FOR PAINTING THE ROOF

Mix ten pounds dry paint to one gallon boiled linseed oil, and one pint Japan drier.

IT IS NOT WHAT WE SAY, BUT WHAT OUR CUSTOMERS RECOMMEND, AND OUR GOODS FILL THEIR REPRESENTATIONS.



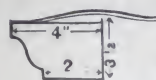




O. G. HANGING GUTTERING, GALVANIZED STEEL  
27 TO 22 GAUGE, GALVANIZED STEEL

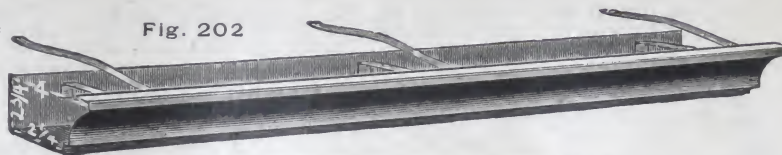
These are made in 8 feet lengths without joints, and are well braced and strapped.

QUOTATIONS INCLUDE STRAPS AND BRACES.



Four inch Face

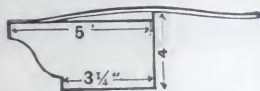
Fig. 202



Our O. G. Hanging Gutter or Eaves Trough, No. 1.  
For Porch or Small Roofs, 10 feet or Less Rafters

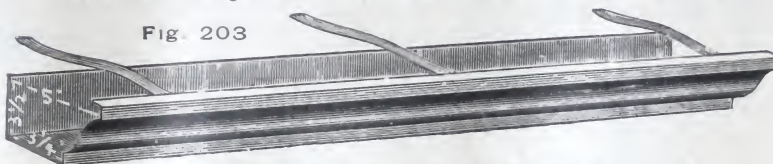
26 gauge, per lineal foot (straps and braces)	13 cents
24 " " " "	15 "
22 " " " "	17 "

Ends and tubes charged as one foot miters, convex or concave, as three feet.



Five inch Face

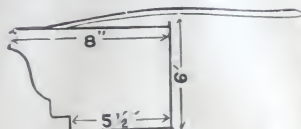
Fig. 203



Our O. G. Hanging Gutter or Eaves Trough, No. 2.  
For medium sized Building, Rafters not over 17 feet

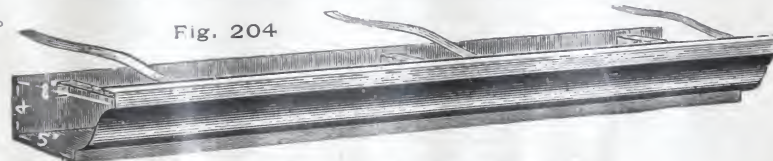
26 gauge, per lineal foot (straps and braces)	15 cents
24 " " " "	17 "
22 " " " "	19 "

Ends and tubes charged as one foot miters, convex or concave, as three feet.



Eight inch Face.

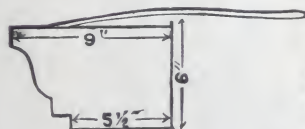
Fig. 204



Our O. G. Hanging Gutter or Eaves Trough, No. 3.  
For Building 50 feet long with 25 feet Rafters

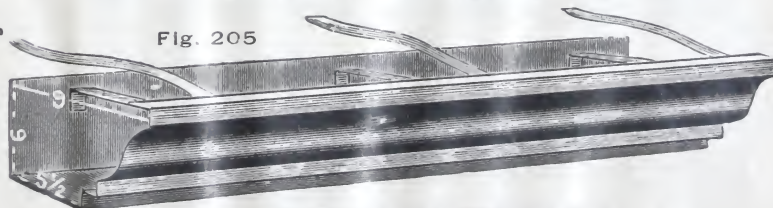
26 gauge, per lineal foot (straps and braces)	20 cents
24 " " " "	22 "
22 " " " "	24 "

Ends and tubes charged as one foot miters as three feet.



Nine inch Face

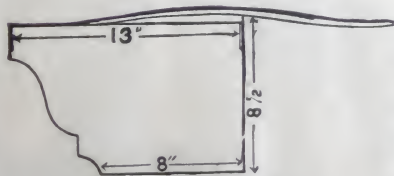
Fig. 205



Our O. G. Hanging Gutter or Eaves Trough, No. 4.  
For Building 75 feet long with 35 feet Rafters

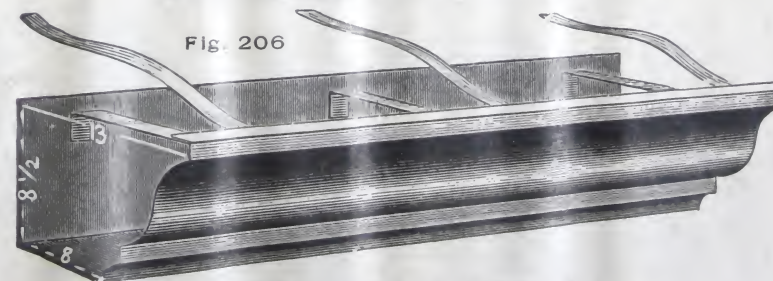
26 gauge, per lineal foot (straps and braces)	24 cents
24 " " " "	26 "
22 " " " "	28 "

Ends and tubes charged as one foot miters as three feet.



Thirteen inch Face.

Fig. 206



Our O. G. Hanging Gutter or Eaves Trough, No. 5.  
For Building with 80 feet or more of water run.

26 gauge, per lineal foot (straps and braces)	52 cents
24 " " " "	54 "
22 " " " "	56 "

Ends and tubes charged as one foot miters as three feet.



# HALF ROUND, MITERS, ENDS AND TUBES

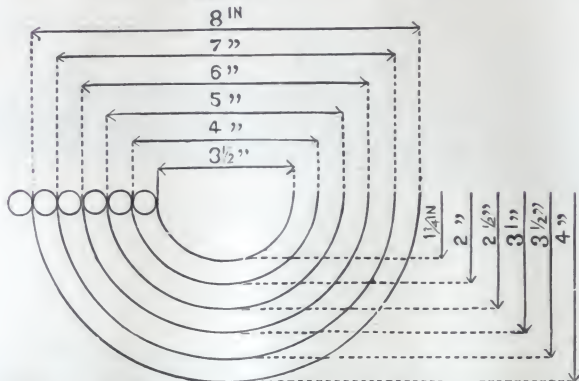
Half Round Galvanized Gutter. 8 feet length with round bead, 10 feet length with square bead.

## Prices on Lap Joint.

26 gauge, 3 1/2 inch, per lineal foot	10 cents	Galvanized Steel 8 feet long	26 gauge, 6 inch, per lineal foot	15 cents
4 " "	11 "	26 gauge, 6 inch, per lineal foot	7 " "	17 "
5 " "	13 "	26 gauge, 6 inch, per lineal foot	8 " "	20 "

24 gauge, 2 cents per lineal foot, advance, 22 gauge, 4 cents per lineal foot, advance. When ordering state whether the fall is to the right or left, and give number of feet each way. End pieces and tubes each charged as a foot. Miters as three feet. For Slip Joints, add 1 cent per lineal foot extra.

Fig. 201



Sectional view of half round Gutters, giving size and capacity.

These are made out of Galvanized Iron, in 8 feet lengths. Ends fitted, also down fall tubes of the different sizes sent with shipment when number wanted are mentioned. We also keep in stock, made of this material, corrugated or smooth downfalls, 2, 3, 4, 5, and 6 inch in 9 1/2 feet lengths, also gutter heads and shoes.

Fig. 200



Covers half circle 3 to 8 inches half round Gutter, made of Galvanized Steel.

Fig. 197

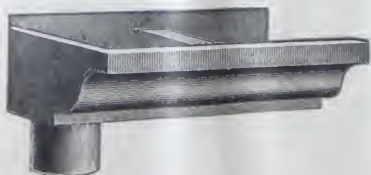


Half round with high back apron for special use, when the fastening of apron is flush with barge board.

Made in 6 sizes, viz. 3 to 12 inches.

Price on Fig. 197, with deep back aprons add 3 1/2 cents per lineal foot to price on regular half round as above.

Fig. 642



Shows End and Tube of O. G. Gutter

Fig. 643



Shows Concave Miter O. G. Gutter

Fig. 644. Shows Convex Miter O. G. Gutter



Shows Slip Joint, Half Round Gutter, 1 cent extra per lineal foot.

Fig. 199

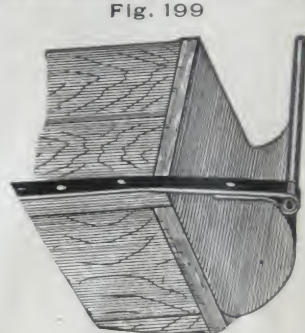


Fig. 646



Shows Concave Miter of Half Round Gutter.

Manner of strapping and bending Gutter	Gutter
Heads for Conductors, Fancy Made	
12 by 6 inches, fit 2 or 3 inch tube end	45c.
16 " 8 " " 3 or 4 " "	70c.
18 " 10 " " 5 or 6 " "	90c.



Fig. 648 1/2

Shows End and Tube, Half Round Gutter.



Fig. 647

Shows Convex Miter of Half Round Gutter.

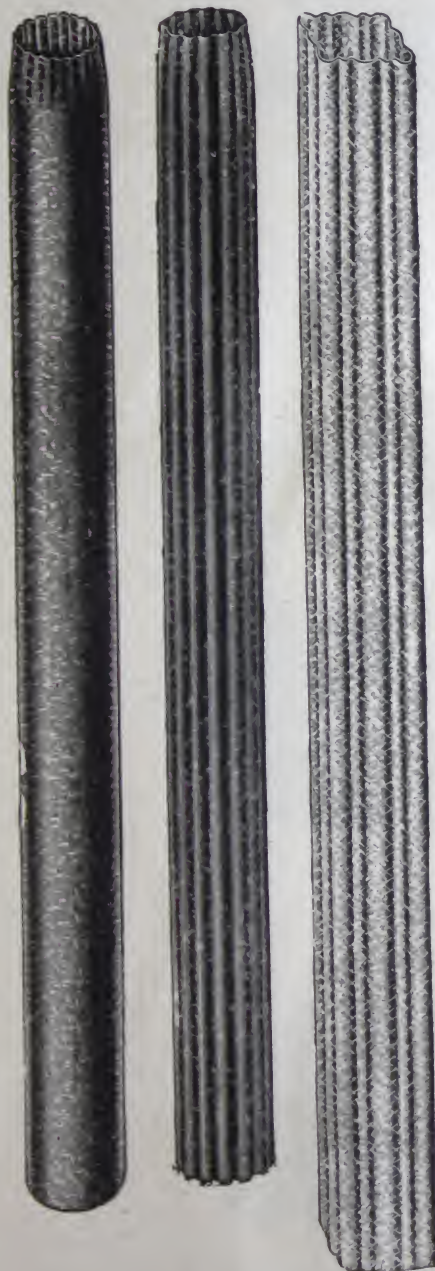


**CORRUGATED EXPANDING  
CONDUCTOR PIPE, Round and Square**

Fig. 160

Fig. 161

Fig. 162



**Conductor Hooks**

PRICE PER 100, NET, TINNED



	For Wood	Brick
2 inch . . . . .	\$1 50	\$1 75
2½ inch . . . . .	2 00	2 00
3 inch . . . . .	2 50	2 75
3½ inch . . . . .	3 00	3 50
4 inch . . . . .	3 50	4 25
5 inch . . . . .	4 50	6 00
6 inch . . . . .	5 50	7 50



**Round Expanding Conductor**

Smooth or Corrugated

PRICE LIST

	No. 28 Galvanized. Per foot	14-oz copper. Per foot
2 inch . . . . .	\$0 13	\$0 40
3 " . . . . .	15	50
4 " . . . . .	20	65
5 " . . . . .	25	85
6 " . . . . .	30	1 00

Fig. 164

**THE CHAUTAUQUA**



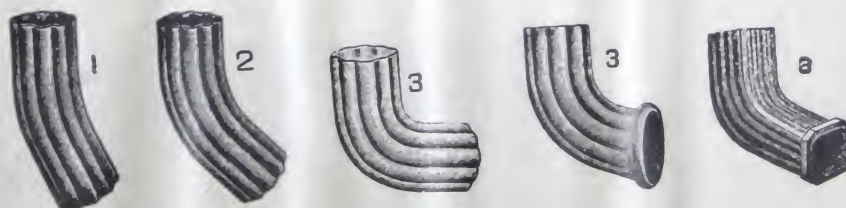
**Square Corrugated Expanding Conductor Pipe**

PRICE LIST

	No. 28 Galvanized. Per foot	14-oz Copper. Per foot
1¾ x 2¼ inch (2 inch) . . . . .	\$0 14	\$0 40
2¾ x 3¾ " (3 " ) . . . . .	16	50
2¾ x 4¾ " (4 " ) . . . . .	21	65
3¾ x 5 " (5 " ) . . . . .	26	85

**EAVE TROUGH HANGER**

Fig. 163



**No. 28 Galvanized Corrugated or Round Expanding Elbows and Shoes**

	2-inch	3 inch	4 inch	5 inch	6 inch
Elbows, each . . . . .	30c	36c	48c	60c	72c
Shoes " . . . . .	40c	48c	60c	72c	84c

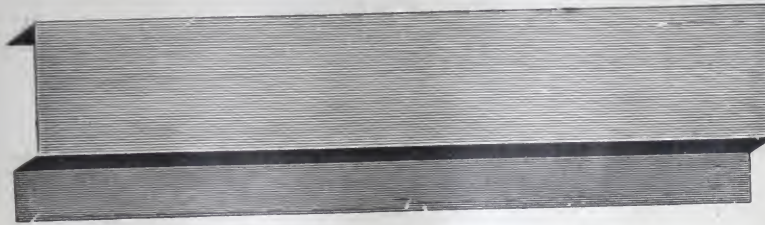
Order Elbows and Shoes by size and number.







Fig. 156

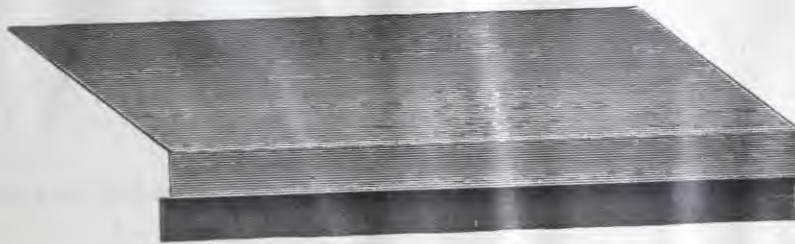


Shows Sheet Steel Door Casing and Jamb, for use in casing Door Frames ; regular length, 120 inches

27 GAUGE STEEL

				Painted.	Galvanized
3 inch face, 12 inch girth, per lineal foot . . . . .				12 cents.	14 cents.
4 " 13 " " " . . . . .				13 "	15 "
5 " 14 " " " . . . . .				14 "	16 "

Fig. 155



Shows Sheet Steel Window Sill, for use in covering sills of windows. Made to order in lengths to fit the sills of windows.

27 GAUGE STEEL

				Painted	Galvanized
9 inch girth, per lineal foot . . . . .				11 cents	13 cents.



For prices on heavier gauges, add 2 cents per lineal foot for each gauge heavier than 27 gauge. Special length and size of girth made to order from specifications.







# U. S. STANDARD GAUGE

For Sheet and Plate Iron and Steel.

COPY.

[PUBLIC—No. 137]

An Act establishing a standard gauge for sheet and plate iron and steel.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*  
That, for the purpose of securing uniformity, the following is established as the only standard gauge for sheet and plate iron and steel in the United States of America, namely:

Number of gauge	THICKNESS		WEIGHT		Number of gauge
	Approximate thickness in fractions of an inch	Approximate thickness in decimal parts of an inch	Weight per square foot in OUNCES avoirdupois	Weight per square foot in POUNDS avoirdupois	
16	1-16	.0625	40	2.5	16
17	9-160	.05625	36	2.25	17
18	1-20	.05	32	2.	18
19	7-160	.04375	28	1.75	19
20	3-80	.0375	24	1.50	20
21	11-320	.034375	22	1.375	21
22	1-32	.03125	20	1.25	22
23	9-320	.028125	18	1.125	23
24	1-40	.025	16	1.	24
25	7-320	.021875	14	.875	25
26	3-160	.01875	12	.75	26
27	11-640	.0171875	11	.6875	27
28	1-64	.015625	10	.625	28

And on and after July first, eighteen hundred and ninety-three, the same and no other shall be used in determining duties and taxes levied by the United States of America on sheet and plate iron and steel. But this act shall not be construed to increase duties upon any articles which may be imported.

SEC. 2. That the Secretary of the Treasury is authorized and required to prepare suitable standards in accordance herewith.

SEC. 3. That in the practical use and application of the standard gauge hereby established a variation of two and one-half per cent. either way may be allowed.

Approved, March 3, 1893.



NEW YORK  
IRON ROOFING *and* CORRUGATING CO.

Pressed Standing Seam

ROLL CAP (Patent Cleat)

. Steel.  
Roofing

V CRIMPED  
(OLD STYLE)

STEEL BRICK

CORRUGATED STEEL

SHEET METAL CLAPBOARDING

Corrugated Oval Iron Siding

Twilled Corrugated, 3-8

Corrugated Diamond Iron Siding

Twilled Corduroys, 3-16

Corrugated Awnings, Shutters and Doors

OBELISK METALLIC PAINT

Corrugated Ceilings, with or without Panels

OBELISK METALLIC CEMENT

Cornice, Gutters, Downfall, &c.

ALL THE ABOVE IN BLACK, PAINTED OR GALVANIZED SHEETS.

First and Washington Streets  
JERSEY CITY, N. J.

SAMPLES, PRICES AND ALL INFORMATION ON APPLICATION.



[BLANK PAGE]



CCA